

Pathfinder® PF200

Siren and Light Controller



FEATURES

- 100/200 W siren and light controller with PA and noise-canceling microphone
- Integrated dual-tone capability when used with (2) speakers
- Integrated Rumbler® traffic clearing capability
- Optional FS Vehicle Integration/On-Board Diagnostics Integration (OBDII)
- Library of selectable siren tones includes SmartSiren®, Unitrol™, PA300, and Powercall siren tones
- (7) programmable inputs and (12) programmable solid-state relay outputs
- Convergence Network Configuration Software allows for easy customization of siren and light controls
- (2) FS Convergence Network ports
- Standard digital voice messages are available in English, Spanish and French Canadian to broadcast alerts. Custom digital voice messages are available for an additional fee
- Five-year warranty

APPROVALS

- SAE J1849
- CCR Title 13
- NFPA 1901

FS TECHNOLOGIES



Pathfinder® PF200 is a compact, programmable siren and light controller available with self-contained controls, remote surface-mount control heads, or handheld control head. Pathfinder PF200 is packed with features such as dual-tone and integrated Rumbler traffic-clearing capability along with optional Federal Signal Vehicle Integration/On-Board Diagnostics (OBDII) integration. Pathfinder PF200 is easy to install and incorporates Convergence Network Configuration Software to provide a high-level of customizable control capability. Convergence Network Configuration Software is available as a download from the Federal Signal website making it easy to program one vehicle – or an entire fleet – from your laptop.

Controller Features

Pathfinder PF200 provides the user with customized control of the siren, warning lights, directional lights, and other accessories. Pathfinder PF200 can control the SignalMaster™ directional functions in light bars, ILS systems and “stick” lights that are compatible with FS Convergence Network as well as Latitude™ 3-wire SignalMaster. For convenient visual reference, the Pathfinder PF200 emulates the selected pattern of the SignalMaster operation.



All controller options feature programmable buttons that can be programmed for press-on, press-off, momentary, and multiple different blinking styles. The button brightness can be dimmed or turned-off for stealth operation. Over (100) labeling stickers, such as alley, gun lock, and wail allow for further customization of the control head.

Button color can be programmed through the Convergence Network Configuration Software. The self-contained and remote models can be programmed in dual-color (Red/Blue) while the Handheld, 21-button, 17-button with rotary knob, 17-button, 6-button and 4-button can be programmed in nine different colors - Red, Blue, Green, Cyan, Magenta, Yellow, White, Purple and Amber.



Pathfinder® PF200 MODELS

PF200

Self-Contained Controls with Rotary Knob and Slide Switch



PF200H

Hand-held Controller / Microphone with (14) buttons



PF2004S

Remote Surface-mount Controller with (4) buttons



PF200R

Remote Surface-mount Controller with Rotary Knob and Slide Switch



PF200S17B

Remote Surface-mount Controller with (17) buttons and Slide Switch



PF200S6

Remote Surface-mount Controller with (6) buttons and Slide Switch



PF200S17BRK

Remote Surface-mount Controller with (17) buttons, Slide Switch, and Rotary Knob



PF200S21

Remote Surface-mount Controller with (21) buttons and Slide Switch



Amplifier Features

Pathfinder PF200 default siren tones include Wail, Yelp, Priority, Manual/Peak-and-Hold, Hi-Lo, Powercall, and Air Horn. A library of other selectable siren tones are available including Unitrol™ branded siren tones such as Wail, Yelp, Futura, Hi-Lo, Ultra Hi-Lo, Alarm, Air Horn, and Hetro. PA, radio rebroadcast, and Air Horn are standard in the Pathfinder. Pathfinder also includes (2) serial ports to be used with the FS Convergence Network devices such as light bars or directional warning lights for easy “plug-n-play” installation.

Other amplifier features include horn ring transfer (TAPII, Timer or Hands Free), Park, Ignition, and (4) general purpose inputs for trunk/door release, gun lock, intrusion alarms and monitoring K9 temperature systems. The polarity of each input is programmable except for ignition.

Timer Feature

The Pathfinder PF200 built-in timer feature senses ignition ON/OFF and allows the selection of multiple time settings. Various devices can be wired to relay outputs on the Pathfinder PF200 amplifier (such as in-car video DVRs, radios, and laptop chargers), and a security shotgun timer is provided to minimize the possibility of unauthorized shotgun release. Pathfinder PF200 timer feature allows the end user to avoid the extra cost of an external timer per vehicle by allowing each device to be turned off at a different time, unlike many one setting external timers used by departments.

Integrated Rumbler® Capability

The Pathfinder PF200 is available with built-in Rumbler traffic-clearing capability. This allows the Pathfinder PF200 to produce a Rumbler tone without the need for a separate externally mounted amplifier. Rumbler capability requires the purchase of Rumbler speakers and vehicle specific mounting kit. Dual-tone capability cannot be utilized with the Rumbler capability unless a complete RUMBLER-C2 or RUMBLER-SOLO, which includes the additional amplifier, is purchased.

- Pathfinder PF200 + (1) 100 W siren speaker = Single tone and standard PA
- Pathfinder PF200 + (2) 100 W siren speakers = Dual-tone and standard PA
- Pathfinder PF200 + (1) 100 W speaker + (1) or (2) Rumbler speakers = Single tone, Rumbler and enhanced PA
- Pathfinder PF200 + (2) 100 W siren speakers + RUMBLER-C2 or RUMBLER-SOLO kit (includes two speakers) = Rumbler, Dual-tone siren, and standard PA (one channel will Rumble)
- Pathfinder PF200 + (1) or (2) Rumbler speakers + (2) 100 W siren speakers + MS4000 = Dual-tone, Rumbler, and enhanced PA



RBKIT-SOLO



RBKIT2-COMPACT

FS Vehicle Integration/On-Board Diagnostics Integration (OBDII)

The FS Vehicle Integration is a simple plug-in connection using the existing vehicle CAN bus system. The FS Vehicle Integration uses a vehicle specific cable (sold separately) to seamlessly integrate with the vehicle allowing light and siren control with vehicle events such as door open, headlight, brake, speed, park, etc. The use of the FS Vehicle Integration removes the need to separately wire certain options such as horn ring transfer or ignition.



OBDCABLE6-1

For a full list of supported vehicles, please visit the [OBDCable Vehicle Reference Chart](http://www.fedsig.com) on www.fedsig.com.

Programming Software Features

The Convergence Network Configuration Software is available as a download from the FS website and siren configurations can be created via laptop computer. Configured programs can be extracted, modified, and stored for ease of service and re-use. The Federal Signal Convergence Network allows the user to “plug-and-play” simply by connecting the siren to the vehicle’s light bar. Pathfinder PF200 gives the user the ability to clone an entire fleet of siren functions. The user simply connects the Pathfinder PF200 to a PC and downloads the functions of the programmed software onto a USB drive to download functions to each siren.



CONVERGENCE NETWORK CONFIGURATION SOFTWARE

Rear Expansion Module (EXPMOD-2)

The EXPMOD-2 Rear Expansion Module works with any Pathfinder Siren to provide an additional (16) 7.5 Amp flashing outputs and (2) 20 Amp control outputs. The Rear Expansion Module makes installation faster and easier by giving you full control of OEM brake, tail, turn, reverse and third brake light lighting without the use of additional flashers. (9) blackout relays are also included that allow trained officers to have the ability to cut off all rear lighting to avoid detection. The Rear Expansion Module includes (3) serial ports to be used with the FS Convergence Network devices such as light bars or directional warning lights for easy "plug-and-play" installation.



EXPMOD-2

The Rear Expansion Module is controlled by a Pathfinder siren that can be programmed through the Convergence Network Configuration Software to provide a high-level of distributed and customizable control capability. Up to two Rear Expansion Modules can be used with a Pathfinder Siren providing a total of (32) 7.5 Amp flashing outputs and (4) 20 Amp control outputs. Vehicle specific rear taillight connection wire harnesses are available for the Dodge Charger Pursuit, Chevrolet Tahoe, Dodge Durango, and Ford Police Interceptor Utility.

24-Channel Expansion Module (EXPMOD24)

The EXPMOD24 24-Channel Expansion module works with any Pathfinder Siren to provide an additional 24 flashing outputs to a Pathfinder System. The 24-Channel Expansion Module is controlled by a Pathfinder siren that can be programmed through the Convergence Network Configuration Software to provide a high-level of distributed and customizable control capability. The maximum output current for each relay can also be set with the Convergence Network Configuration Software. The 24-Channel Expansion Module is potted to help protect it from unfavorable weather conditions making it ideal for under the hood mounting. Up to four 24-Channel Expansion Modules can be used with a Pathfinder siren.



EXPMOD24

32-Channel Expansion Module (EXPMOD32)

The 32-Channel Expansion module works with any Pathfinder siren to provide an additional 32 flashing outputs to a Pathfinder system. The Expansion Module makes installation faster and easier by providing 3-SPDT, diode-isolated relays allowing for brake light blackout and/or brake/ taillight flash, eliminating the need for a taillight flasher. The blackout feature allows trained officers to have the ability to cut off all rear lighting to avoid detection.

The 32-Channel Expansion Module is programmed through the Convergence Network Configuration Software to provide a high level of distributed and customizable control capability. The maximum output current for each relay can also be set within the software. The 32-Channel Expansion Module is potted to help protect it from unfavorable weather conditions making it ideal for under the hood mounting.

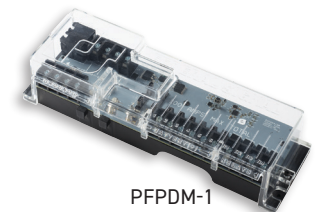


EXPMOD32

Up to four 32-Channel Expansion modules can be used in a system. Each Expansion Module has a module identifier to easily help identify while programming in the Convergence Network Configuration software.

Power Distribution Module (PFPDM-1)

The PFPDM-1 Power Distribution Module provides electrical power from one main power source. The Power Distribution Module makes installation faster and easier and increases reliability due to having fewer failure points. In the case of a product losing power, the Power Distribution Module features diagnostic LEDs that will allow the failure point to be quickly located. The Power Distribution Module includes (4) serial ports to be used with the FS Convergence Network devices, such as light bars or directional warning lights, for easy "plug-and-play" installation. The Power Distribution Module also includes (4) programmable outputs that can be programmed through the Convergence Network Software to provide a high-level of distributed and customizable control capability.



PFPDM-1

On Scene Sync Module (PFSYNC-1)

The PFSYNC-1 On Scene Sync Module works in conjunction with any Pathfinder Siren to provide synchronization between multiple "like-programmed" vehicles. On Scene Sync Module uses a GPS signal to maintain timing between vehicles providing the capability to synchronize warning lights, and voice messages to unify the visual and audible warning of multi-vehicle response. An ambient light sensor is also included in the On Scene Sync Module to auto adjust warning lights.



PFSYNC-1

Perimeter Breach Warning System

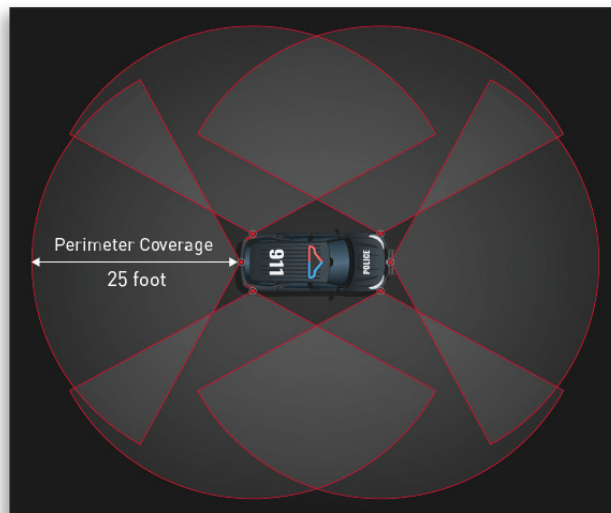
Designed with the officer's safety in mind, the Perimeter Breach Warning System is a vehicle radar detection system that utilizes six sensors around the vehicle to alert officers of potential threats within a 25-foot radius.

The Perimeter Breach Warning System is ideal for officers who spend extended hours in the field creating incident and end of shift reports. The Perimeter Breach Warning System is easily activated by a button on the steering wheel or siren control head, providing officer enhanced situational awareness while finishing paperwork.

If an unexpected pedestrian enters the activation zone, the system activates audible and/or visual signals inside the vehicle to alert the officer. Additionally, warning lights, voice messages, or flood lighting can be automatically activated prompting the pedestrian to pause, giving the officer crucial time to react.

Customization of the audible and visual alerts are programmable through Federal Signal's Convergence Network configuration software.

Deactivation is simple, either through the siren controller or by shifting the vehicle out of park.



PBW-SYSTEM

SPECIFICATIONS
PATHFINDER PF200

AUDIO OUTPUT POWER	200 W
INPUT VOLTAGE	11/28 Vdc
NOMINAL OUTPUT VOLTAGE	64 V peak-to-peak
STANDBY CURRENT	< 0.1 A
INPUT CURRENT, OPERATING	16 A
OPERATING TEMP	-40° to +176° F (-40° to +80°C)
POLARITY	Negative ground only
FREQUENCY RANGE	182 to 1600 Hz

AMPLIFIER PHYSICAL SPECIFICATIONS

	PF200	PF200R	PF200H	PF200S17B/ PF200S17BRK/ PF200S21	PF200S6	PF200S4
HEIGHT	2.5 in (6.4 cm)	2.5 in (6.4 cm)	2.5 in (6.4 cm)	2.5 in (6.4 cm)	2.5 in (6.4 cm)	2.5 in (6.4 cm)
WIDTH	6.0 in (15.2 cm)	6.0 in (15.2 cm)	6.0 in (15.2 cm)	6.0 in (15.2 cm)	6.0 in (15.2 cm)	6.0 in (15.2 cm)
LENGTH	7.0 in (17.8 cm)	7.0 in (17.8 cm)	7.0 in (17.8 cm)	7.0 in (17.8 cm)	7.0 in (17.8 cm)	7.0 in (17.8 cm)

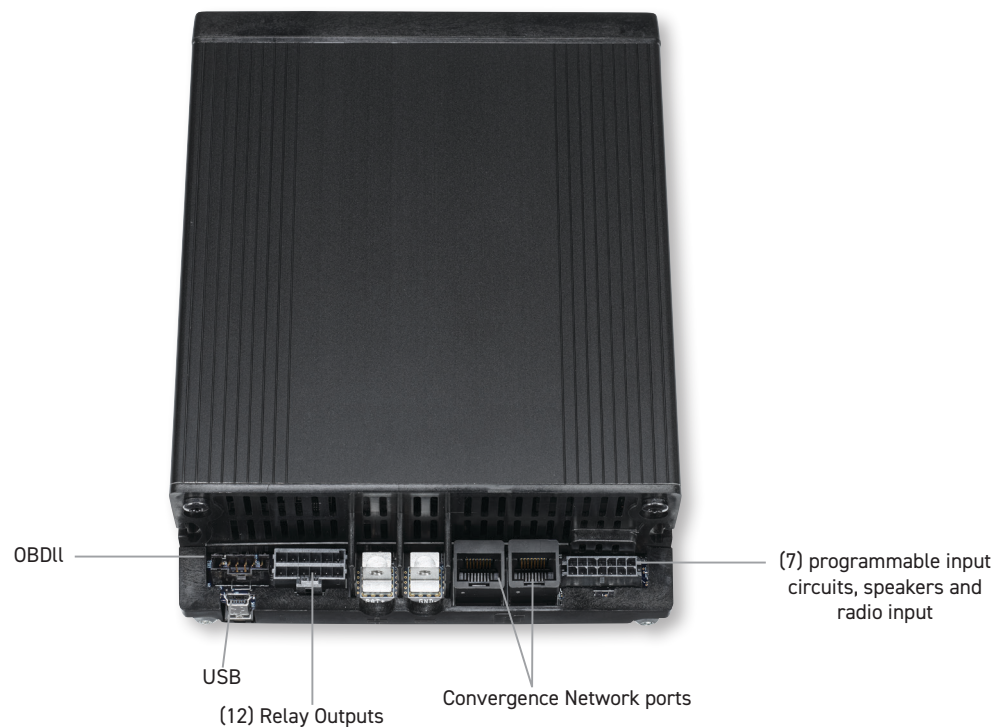
CONTROL HEAD PHYSICAL SPECIFICATIONS

HEIGHT	2.5 in (6.4 cm)	2.5 in (6.4 cm)	6.0 in (15.2 cm)	3.3 in (8.4 cm)	2.8 in (7.1 cm)	1.6 in (4.1 cm)
WIDTH	6.0 in (15.2 cm)	6.0 in (15.2 cm)	2.5 in (6.4 cm)	6.8 in (17.3 cm)	2.6 in (6.6 cm)	3.5 in (8.9 cm)
LENGTH	8.4 in (21.3 cm)	1.5 in (3.5 cm)	1.3 in (3.3 cm)	1.4 in (3.6 cm)	1.1 in (2.8 cm)	1.0 in (2.5 cm)

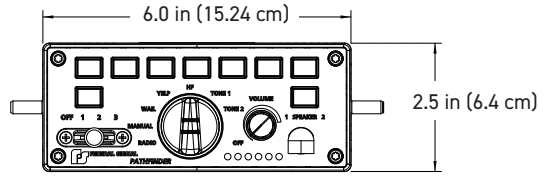
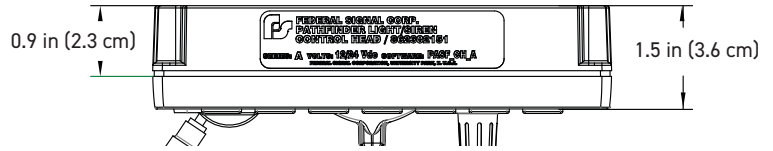
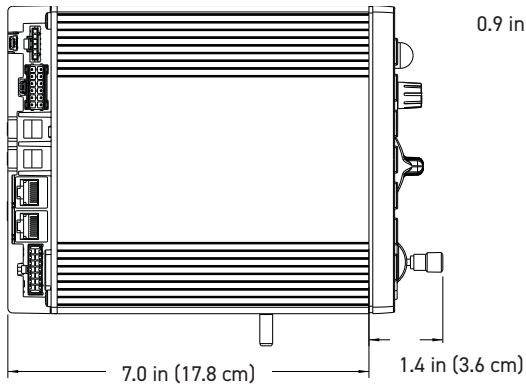
SHIP WEIGHT

	4.7 lb (2.1 kg)	6.0 lb (2.7 kg)	5.0 lb (2.3 kg)	6.0 lb (2.7 kg)	5.9 lb (2.7 kg)	5.9 lb (2.7 kg)
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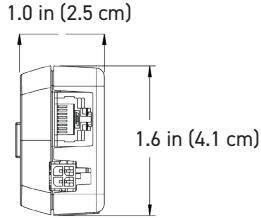
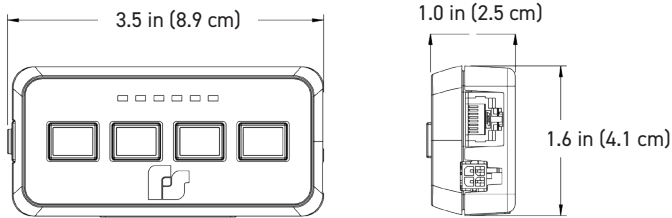
Top View of PF200



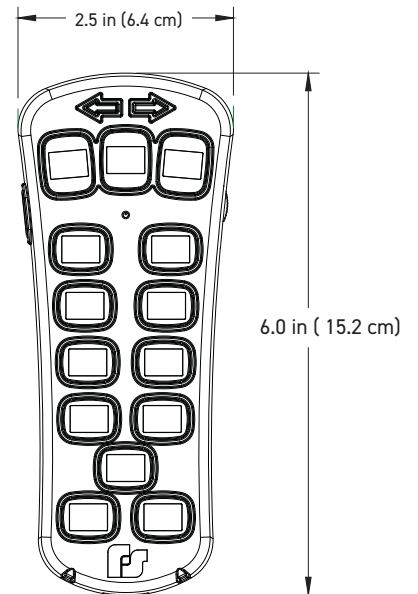
PATHFINDER PF200 DIMENSIONS



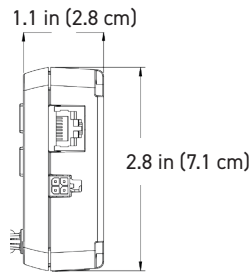
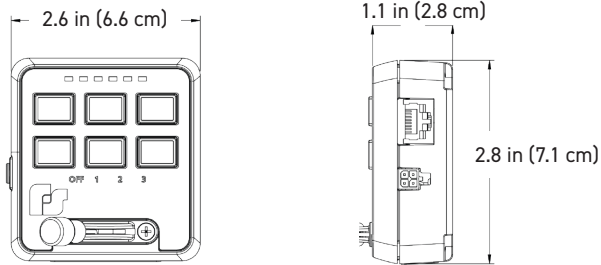
4-BUTTON CONTROLLER



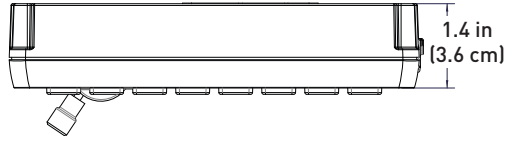
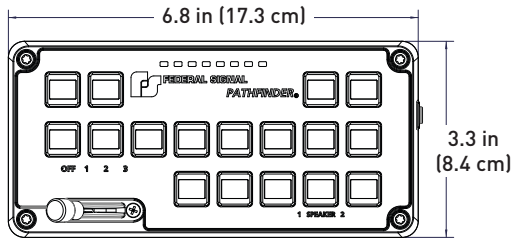
HAND-HELD CONTROLLER



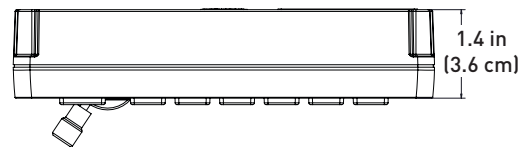
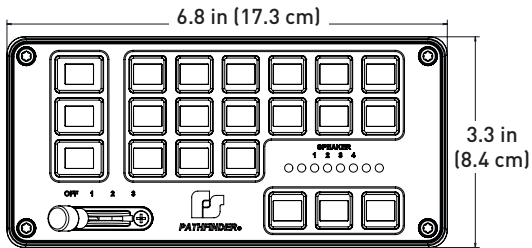
6-BUTTON CONTROLLER



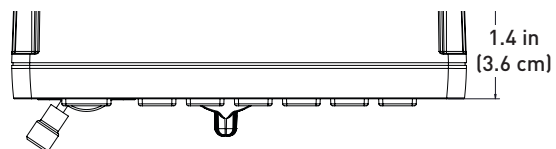
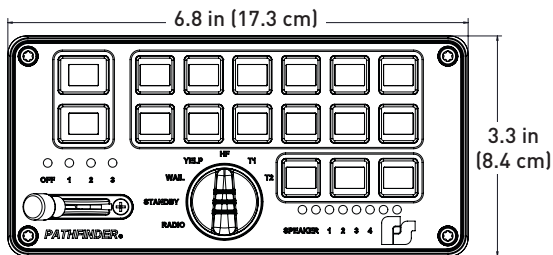
17-BUTTON CONTROLLER



21-BUTTON CONTROLLER



17-BUTTON WITH ROTARY KNOB CONTROLLER



HOW TO ORDER

PF200S6	Siren/Light Controller with 6 button controller, 100/200 W, OBDII integration capability, integrated Rumbler capability and Integrated dual-tone capability
PF200S4	Siren/Light Controller with 4 button controller, 100/200 W, OBDII integration capability, Integrated Rumbler capability and integrated dual-tone capability
PF200	Siren/Light Controller with self-contained controls, 100/200 W, OBDII integration capability, integrated Rumbler capability, and integrated dual-tone capability
PF200R	Siren/Light Controller with Remote surface mount controller, 100/200 W, OBDII integration capability, integrated Rumbler capability, and integrated dual-tone capability
PF200H	Siren/Light controller with hand-held controller/microphone, 100/200W, OBDII integration capability, integrated Rumbler capability, and integrated dual-tone capability
PF200S17B	Siren/Light Controller with 17 button controller, 100/200 W, OBDII integration capability, integrated Rumbler capability, and integrated dual-tone capability
PF200S17BRK	Siren/Light Controller with 17-button and rotary knob controller, 100/200 W, OBDII integration capability, Rumbler capability, and integrated dual-tone capability
PF200S21	Siren/Light Controller with 21-button controller, 100/200 W, OBDII integration capability, Rumbler capability, and integrated dual-tone capability
PF200AMP	Pathfinder PF200 Amplifier, no controller

ACCESSORIES

PF-VM	1-3 custom messages, one-time set up fee
MNCT-SD	1/4-inch jack microphone
RMK	Remote extension kit for 1/4-inch jack microphone
RBKIT-SOLO*	Single Rumbler Solo low frequency speaker for use with sirens with integrated Rumbler capability
RBKIT2-COMPACT*	Pair of Rumbler Compact low frequency speakers for use with sirens with integrated Rumbler capability
PFPDM-1	Power Distribution Module, 100 A max load
PFSPLTR-4	4-to-1 splitter
PFSYNC-1	On Scene Sync Module
EXPMOD24	24-Channel Expansion Module
EXPMOD32	32-Channel Expansion Module
EXPMOD-2	Rear Expansion Module, (18) solid state programmable relay outputs, (16) 7.5 Amp flashing outputs and (2) 20 Amp control outputs
EXPHARN01	Rear taillight connection wire harness for use with EXPMOD-2 expansion module, Dodge Charger Pursuit, 2015-2024
EXPHARN06	Rear taillight connection wire harness for use with EXPMOD-2 expansion module, Ford Interceptor Utility 2020-2025
EXPHARN04	Rear taillight and rear liftgate lighting connection wire harness for use with EXPMOD-2 expansion module, Dodge Durango, 2018-2025
EXPHARN05	Rear taillight connection wire harness for use with EXPMOD-2 expansion module, Chevrolet Tahoe, 2021-2024
PBW-SYSTEM	Perimeter Breach Warning System, includes (6) radar sensors, mounting screws, and (2) harnesses
PBWK-FPIU20	Perimeter Breach Warning System mounting kit, Ford Police Interceptor Utility, 2020-2025
PBWK-TAH21	Perimeter Breach Warning System mounting kit, Chevrolet Tahoe, 2021-2025
PBWK-DUR23	Perimeter Breach Warning System mounting kit, Dodge Durango, 2023-2025

*VEHICLE SPECIFIC RUMBLER BRACKETS SOLD SEPARATELY

NOTE: FOR OBD CABLE PART NUMBERS, PLEASE VISIT [THE OBD CABLE VEHICLE REFERENCE CHART ON WWW.FEDSIG.COM](http://WWW.FEDSIG.COM).



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Warning: Sirens and Speakers may produce LOUD sounds necessary to request the right-of-way. Sirens and Speakers may cause hearing damage. Wear hearing protection.