

# City of Jonesboro

  
Outdoor Warning  
System Presentation

By:

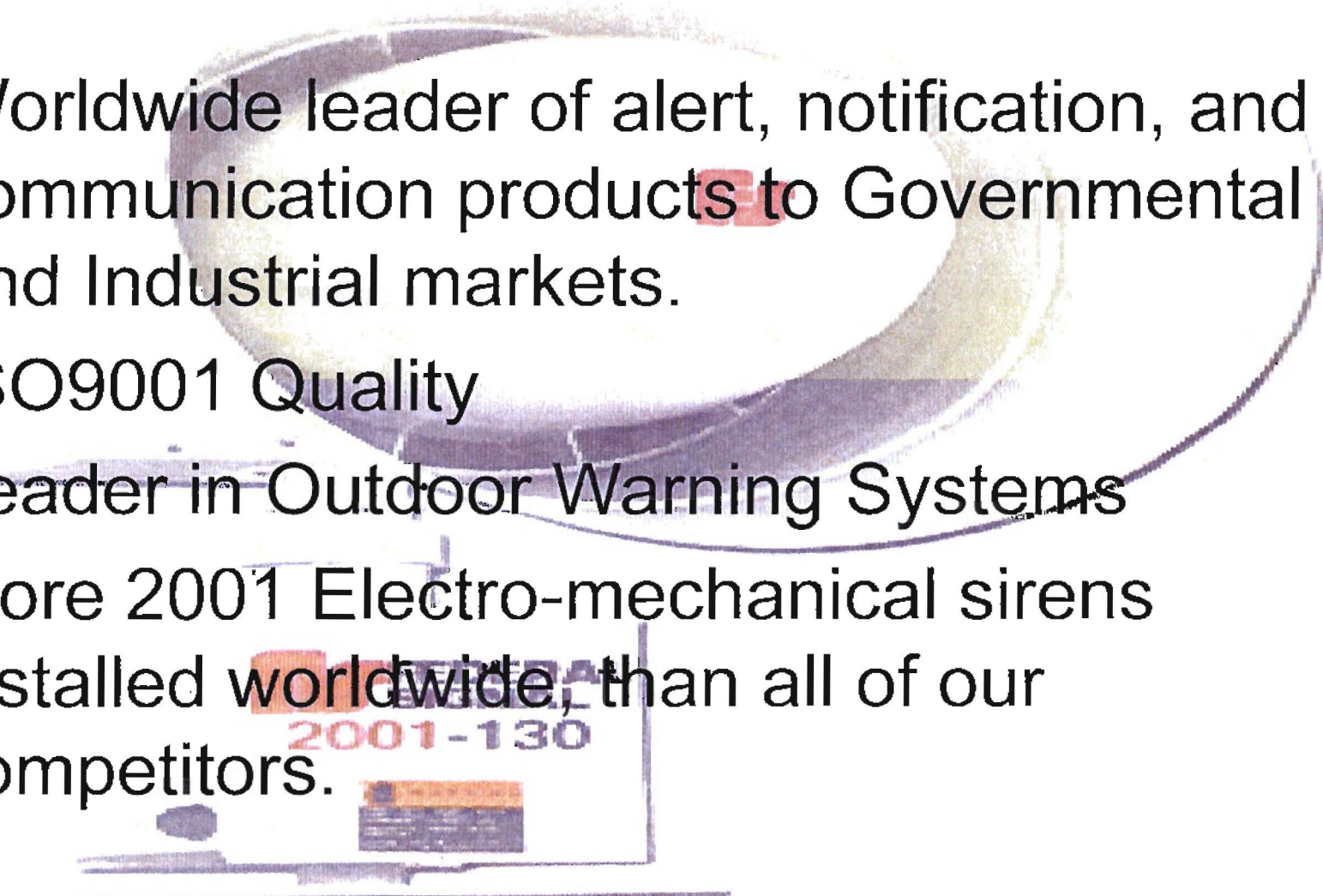
Federal Signal Corporation

2001-130



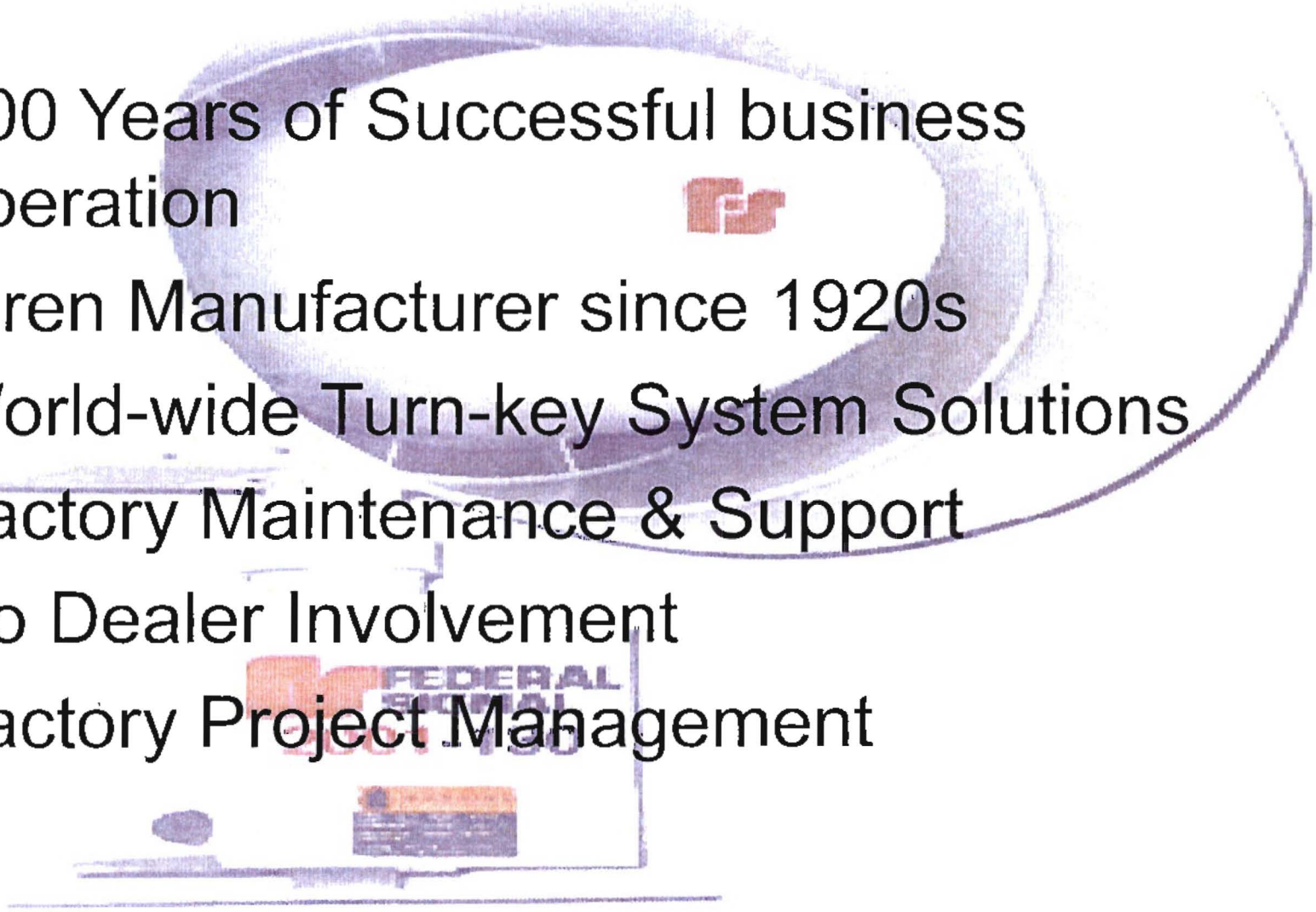
# Federal Signal Corporation

- Worldwide leader of alert, notification, and communication products to Governmental and Industrial markets.
- ISO9001 Quality
- Leader in Outdoor Warning Systems
- More 2001 Electro-mechanical sirens installed worldwide, than all of our competitors.



# Competitive Advantages

- 100 Years of Successful business operation
- Siren Manufacturer since 1920s
- World-wide Turn-key System Solutions
- Factory Maintenance & Support
- No Dealer Involvement
- Factory Project Management



# Federal Signal vs. ASC Dealer

- Federal Signal recommended upgrade of existing system to reduce cost, while ASC dealer recommended complete replacement.
- New Federal Signal 2001-130 sirens are tested by independent sound lab to verify output of 130db.
- ASC website still shows T-128 siren as a 128db siren(<http://www.americansignal.com/PDF/T-128.pdf>), which shows that brochure was changed to be competitive with Federal Signal 130db siren.
- Difference of 128db vs. 130db siren is over 1/4 mile diameter for each siren unit.
- ASC Dealer claims to have met all specifications in bid response, but T-128 siren does not meet specs

# Training Program

- **Conducted by In-House Systems Planning and Application personnel**
- **Programs specifically designed to meet the needs of each customer**
- **System Planner serves as Training Manager supported by:**
  - **Marketing Mgr, Product Mgr, and other Commissioning Agents as required**

# Installation Advantages

- Factory Turnkey Installation
- Factory trained Installation Teams
- Installers located in Little Rock, AR, Clanton, AL., Edmond, OK., Sherman, Tx. And others.
- All Installers are overseen by Factory Project Managers to verify installation completed according to factory specifications.

# Maintenance Advantages

- Factory Service and Maintenance
- Existing Service Centers available in Little Rock, AR., Clanton, AL.
- A local Jonesboro Service Center can be factory trained to provide more local factory maintenance.
- Paragould Communications does not have access to Federal Signal parts to maintain existing 2001 sirens.

# Conclusion

- Federal Signal is the most stable and successful siren manufacturer in the world
- Purchasing from a dealer takes the factory support out of the picture.
- Federal Signal has offered Jonesboro the best possible solution from the beginning.
- Jonesboro is a longtime customer of Federal Signal, so we feel that we understand your system and your needs.



We Appreciate the opportunity  
to continue to be the siren  
provider for the City of  
Jonesboro.

Thank you for your  
consideration

2001-130





# TEMPEST™

# T-128

## T-128 at 70dB\*

■ Competitor Fat 128db    ■ ASC's T-128

Hilly	0.96 miles	1.44 miles
Average	1.24 miles	1.87 miles
Flat	1.44 miles	2.16 miles

## SYSTEM SPECIFICATIONS

Acoustical Characteristics	Rating
Tempest-128	128 dB @ 100ft.
Output Frequency	500 Hz
<b>Electrical</b>	
AC Power Voltage	120/240 v DC 50/60 Hz
Operational Voltage	48 v DC
AC Control	40 Amp Service AC
Battery Charge Current	4 Amps (max)
Duty Cycle	30 min.
Battery Standby Duration	21 Days
<b>Environmental</b>	
Operation Temperature	-40°C to 60°C
Storage Temperature	-65°C to 125°C
Humidity	0%-100% (non-condensing)
Wind Speed	150 Mph
<b>Size and Weight</b>	
LxHxW	
Siren Weight	275 lbs.
DC Control Cabinet	210 lbs.
AC Control Cabinet	59 1/2"x65"x57"

Pricing and specifications are subject to change without notice. Decibel ratings meet ANSI-S-12.14-1992 and IOS 3746 specifications, and were produced under ideal weather test conditions. Actual decibel output may vary depending on site-specific variables, including weather. Systems should be designed accordingly.

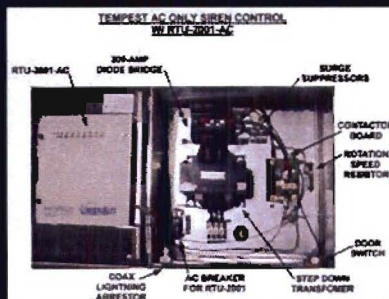
## STANDARD SIGNAL FORMATS

<b>ALERT</b>
Steady Tone, 3 minutes
<b>ATTACK</b>
Wailing Tone, 6 sec. Hi / 6 sec. Low, 3 minutes
<b>FIRE</b>
Wailing Tone, 16 sec. Hi / 8 sec. Low, 4 Cycles



## INSTALLATION

For maximum sound dispersion, sirens should be mounted 45'-55' above grade. An optional pole mount is available for mounting the poles on a standard wooden utility pole. The center mount, low silhouette siren design eliminates the need for support wires. The siren can also be mounted on proper structures such as roofs, towers, etc. Mounting brackets for these applications and additional installation accessories are available from American Signal.



UNITED STATES POST OFFICE



# TEMPEST™ T-128

*We challenge you to compare our sirens & control systems with any manufacturer's!*

ASC's many years of experience in the warning system industry since 1942 has culminated with the advent of the Tempest™ line of most reliable and coverage effective sirens on the market to date.

Available in low-cost AC operation, DC battery pack operation, and True UPS design with AC power as the main supply source and DC battery backup in the event of a power failure.

The Tempest™ T-128 is designed to be maintenance free. Many composite components are used to reduce or eliminate the damaging effects of harsh environmental conditions. All ASC high powered siren systems are constructed using stainless steel hardware.

ASC can also provide all control components such as the siren control, radio decoder (optional), and service disconnect to one mounting channel which is pre-wired at the factory. The mounting configuration reduces field installation mistakes as well as installation time and cost.

## Siren Design Characteristics

The T-128 siren utilizes aluminum sound-producing components which are covered in color-impregnated fiberglass to eliminate rusting and painting maintenance.

Sirens are mounted directly over the center mounting poles so that guy wires are not required.



## Customize our systems to your specifications

The Tempest™ can be connected to your personal computer and monitored from anywhere with the addition of one of our CompuLert™ graphic user interface options. Our expert team can custom create an Early Warning or Mass Notification System to suit your specific needs and maximize life saving potential.



Learn more at:

[www.AmericanSignal.com](http://www.AmericanSignal.com)

## FEATURES

- Rotational directional design, 360° coverage
- No maintenance on siren head EVER!
- System can be configured for AC operation, DC operation, or True UPS backup
- Direct Drive Rotation Design eliminates chains and belts that will fail and require maintenance
- Factory sealed motor bearings eliminates maintenance
- Stainless Steel Hardware with a 5 year parts warranty
- UL Listed
- Screened air intake and output.

## 500Hz ADVANTAGE

**\*All dBs are NOT CREATED EQUAL!**

Please E-mail us at [ContactUs@americansignal.com](mailto:ContactUs@americansignal.com) to learn more!



**AMERICAN  
SIGNAL CORPORATION**



# 2001-130 SIREN



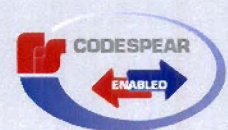
## > Features

- 130 dB(C) output
- Directional, rotating siren for maximum coverage
- Three distinct warning signals
- Full battery operation or battery back-up
- Maintenance-free sealed bearing motors
- Weather-resistant coating
- Ideal for outdoor warning
- 5-year limited warranty

The Federal Signal 2001-130 public siren is a high power, rotating, uni-directional outdoor siren that offers an anechoic certified signal strength of 130 dB(C) +/- 1 dB(C) at 100 feet. 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's projector produces a 60 degree projection of sound which rotates at 3 RPM and can produce three signals options: steady, wail, and fast wail. The 2001-130 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, AC operation, and AC operation with battery back-up, one-way and two-way radio control or landline.

Ideally suited to provide warning for hazardous weather conditions, fires, floods, chemical spills and other types of emergencies, the 2001-130 siren is a perfect choice to protect any community.



## > Specifications

Power Requirements*		
Siren Motor	48V (DC or full wave rectified AC) 110 amps. (nom.)	
Rotator Motor	48V (DC or full wave rectified AC) 1 amps. (nom.)	
Wiring		
Siren Motor	2 AWG	
Rotator Motor	12 AWG	
Motor Type		
Siren	Series wound DC 6 Hp	
Rotator	Permanent magnet DC 1/8 Hp	
Signal Information		
Signal	Frequency Range	Sweep Rate
Steady	795 Hz	N.A
Wail	470-705 Hz	10 sec.
Fast Wail	600-705 Hz	3.5 sec.
Signal Duration	3min. std. (programmable)	
Signal Output (SPL)	130 dB(C) +/- 1 dB(C) at 100' (30.5 m)	
Effective Range at 70dBC	6200ft	
Rotation	3 RPM	
Dimensions		
Height x Width x Depth	55" x 37" x 41"	
	140cm x 94cm x 10cm	
Weight		
Shipping Weight	450 lbs. (205 kg)	
Operating Temperature		
	-30°C to +60°C**	

\* Power requirements refer to the power supplied by the batteries or optional AC operation through 2001TRB

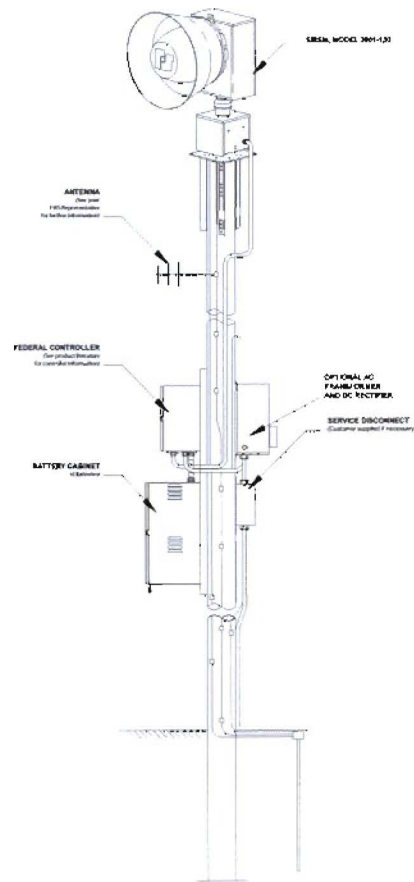
\*\* The siren can operate throughout this temperature range provided that battery temperature is maintained at 18°C or higher.

Ordering Information*	
Siren Motor	Rotating electro-mechanical Siren 130 dB(C) +/- 1dB(C), 48v DC, pole mount included
2001AC <sup>1</sup>	AC operated motor control, 208 or 220/240v AC (specify voltage) NEMA 3R control cabinet, two 48v DC connectors and transformer/rectifier, 182 lbs 53 kg
2001DC <sup>1,2</sup>	120v AC motor control, NEMA4 control cabinet, four chargers, two 48v DC connectors and NEMA 3R battery cabinet. 224 lbs. 102 kg
Landline Option	
2001HR	Rotator holding relay for use with external timer

\* 2001-130 Siren requires a Federal Controller such as FC or DFCB (See controller product literature)

<sup>1</sup> For use with Electro-mechanical sirens. Antenna and cable are not included with any radio activation control and must be purchased separately (See your sales representative)

<sup>2</sup> Batteries not included. Four Delco Voyager Model M24MF batteries required





# ACFCTB AC ONLY TWO-WAY DIGITAL CONTROLLER

The Federal Signal ACFCTB is a two-way status monitoring siren controller for use with the Federal Signal 2001-130 siren and Eclipse siren series when batteries are not desirable. The controller interfaces to an off-the-shelf two-way radio transceiver and communicates to a base control via FSK signalling. In addition to FSK, the controllers will simultaneously decode any combination of single-tone, two-tone sequential, or DTMF formats for activation. This makes the two-way controller compatible with virtually any existing siren control system.

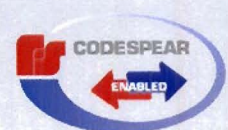
All ACFCTB models come equipped with two (2) independent relay outputs, which can be programmed to activate with various codes. There are four (4) landline inputs and five (5) local push buttons, which can be used to activate and cancel the unit. Activation codes, relay timing and optional warning sounds are programmed into the unit through a standard RS232 serial port.

The ACFCTB contains six (6) user programmable functions in addition to the five pre-set functions: ARM, DISARM, REPORT, GROWL TEST, and MASTER RESET. The controller includes the necessary sensors and wiring to provide information on the following areas of operation: AC Power Status, Communications Status, Low Battery Voltage Indication, Siren Activation Current, Intrusion, and Siren Rotation.

A transformer/rectifier, used for primary system power is included with each model and necessary to operate the 48VDC sirens without batteries.

## > Features

- AC-only two-way siren controller for 48VDC sirens.
- Two-way radio control and status monitoring.
- FSK two-way signaling format.
- Simultaneous single tone, two-tone sequential, and dtmf decoding.
- Internal battery backup for RTU.
- UL listed for general signaling.



## > Specifications

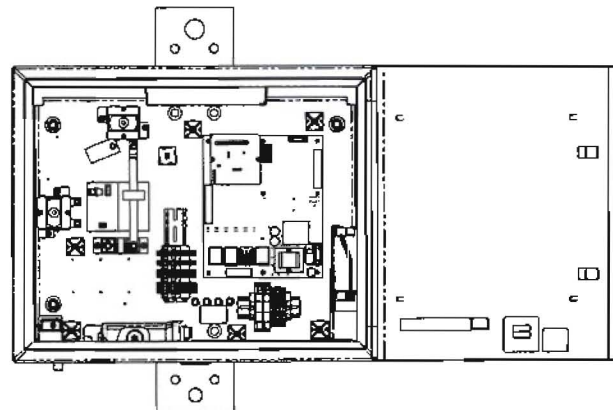
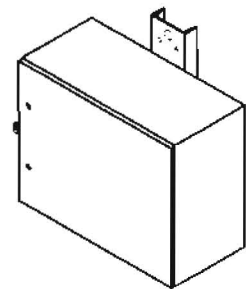
Electrical	
AC supply voltage	115 VAC @ 4.0 amps
Current Draw	+/- 10%, 50/60 Hz, maximum standby current
Power Supply	8A @ 13.3 VDC
Battery Backup	12v DC 12A/H standby
Current Draw	< .2 amps in standby
Serial Ports	
Serial Port Protocol	RS232C 1200, N,8,1
Transceiver	
Programmable Frequency	Power out and private line options. For further details consult Motorola product manual.
Signaling Format	
FSK	1200 baud, MSK modem type Usable decode sensitivity: 10dB SINAD (min.)
DTMF	3-12 standard DTMF characters
Two-Tone Sequential	
Frequency Range	282 Hz - 3000 Hz (non-CTCSS) 400 Hz - 3000 Hz (CTCSS)
Tone Timing	.5 sec - .25 sec min. to 8 sec max
Intertone Gap	400ms (maximum)
Tone Accuracy	+/- 1.5%
Tone Spacing	5.0% preferred, 3% min
Single Tone	
Frequency Range	282 Hz - 3000 Hz
Tone Timing	0.5 sec. - 8 sec maximum
Tone Accuracy	+/- 1.5%
Tone Spacing	5.0% preferred, 3% min.
Relay Outputs	
4 relay outputs	SPST
Contact Rating	(2 relays standard, 4 relays Max.) 5A @ 28v DC 5A @ 240v AC
Audio Output	
Output Voltage	<2V peak to peak
Maximum Load	8 Ohms
Total Harmonic Distortion	<10% @ 1kHz Sinewave
Environmental	
Operating Temperature	-30°C to 65°C

Controller Dimensions	
HxWxD	18" x 22.5" x 11" (457.2mm x 571.5mm x 279.4mm) NEMA 4X rated
Shipping Weight	
Approx. Shipping Weight	155 lbs. (70.5 kg)
2001TR: AC Primary Operation	
Operating Voltage	208/220/240VAC single phase
Current Requirements	25-30 Amps. (nominal)
Dimensions	23"x11"x10" (584mm x 279mm x 254mm)
Weight	150 lbs. (68.2 kg)
Order information	
ACFCTB(D) <sup>1,2</sup>	Two-way Federal Controller
ACFCTB(D)H <sup>1,2</sup>	Two-way Federal Controller, high band 148-174 MHz
ACFCTB(D)U <sup>1,2</sup>	Two-way Federal Controller, UHF band 450-470 MHz
(D)	Indicates digital Federal Controller two-way.
Options	
FSPWARE	Federal programming software (Non-digital applications)
SFCDDWARE	Federal Commander Digital Software (See literature for details)

(D) Indicates digital Federal Controller two-way.

<sup>1</sup> For use with 2001-130 and Eclipse siren series.

<sup>2</sup> Antenna and cable are not included with radio activation control and must be ordered separately.



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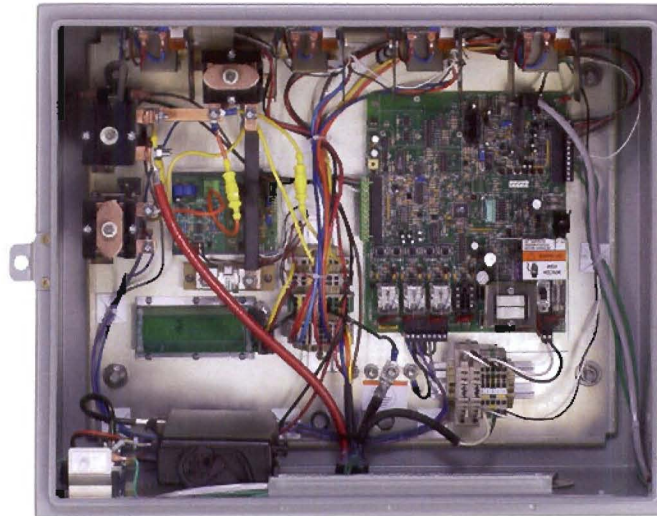




# DCFCTB DC TWO-WAY DIGITAL CONTROLLER FOR 2001 & ECLIPSE SIREN SERIES

## > Features

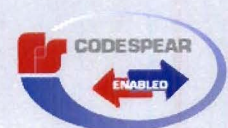
- Two-way siren controller for 48VDC sirens
- Two-way radio control and status monitoring
- FSK two-way signaling format
- Simultaneous single tone, two-tone sequential, DTMF decoding and optional EAS
- Push buttons for local activation
- UL Listed for general signaling



The Federal Signal DCFCTB is a two-way, battery-operated status monitoring siren controller for use with the Federal Signal 2001-130 siren and Eclipse siren series. The controller interfaces with an off-the-shelf two-way radio transceiver and communicates to the base control via FSK signaling. In addition to FSK, the controllers will simultaneously decode any combination of single-tone, two-tone sequential, DTMF or optional EAS formats for activation. This makes the two-way controller compatible with virtually any existing siren control system.

All DCFCTB models come equipped with two (2) independent relay outputs that can be programmed to activate with various codes. There are four (4) landline inputs and four (4) local push buttons for activation, plus cancel. 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 DCFCTB offers six (6) user programmable functions in addition to the five pre-set functions: arm, disarm, report, growl test and master reset. The controller includes the necessary sensors and wiring to supply information on the following areas of operation. AC power status, communications status, low battery status, intrusion, siren activation current and siren rotation.



## > Specifications

Electrical	
AC supply voltage	120 VAC @ 4.0 amps
Current Draw	+/- 10%, 50/60 Hz, maximum standby current
Power Supply	6A @ 13.3v DC
Battery Backup	48v DC (Four model #M24MF Delco Voyagers required)
Current Draw	< .2 amps in standby
Serial Ports	
Serial Port Protocol	RS232C 1200, N, 8, 1
Transceiver	
Programmable Frequency	Power Out and Private Line options. For further details consult the Motorola product Manual.
Signaling Format	
FSK	1200 baud, MSK modem type Useable decode sensitivity: 12dB SINAD (min.)
DTMF	3-12 standard DTMF characters
Two-Tone Sequential	
Frequency Range	282 Hz - 3000 Hz (non-CTCSS) 400 Hz - 3000 Hz (CTCSS)
Tone Timing	5 sec - .25 sec min., 8 sec max
Intertone Gap	400ms (maximum)
Tone Accuracy	+/- 1.5%
Tone Spacing	5.0% preferred, 3% min.
Single Tone	
Frequency Range	282 Hz - 3000 Hz
Tone Timing	0.5 sec - 8 sec maximum
Tone Accuracy	+/- 1.5%
Tone Spacing	5.0% preferred, 3% min.
Relay Outputs	
4 relay outputs	SPST
Contact Rating	(2 relays standard, 4 relays Max.) 5A @ 28v DC 5A @ 240v AC
Audio Output	
Output Voltage	>2V Peak to Peak
Maximum Load	8 Ohms
Total Harmonic Distortion	<10% @ 1kHz Sinewave
Environmental	
Operating Temperature	-30°C to 65°C

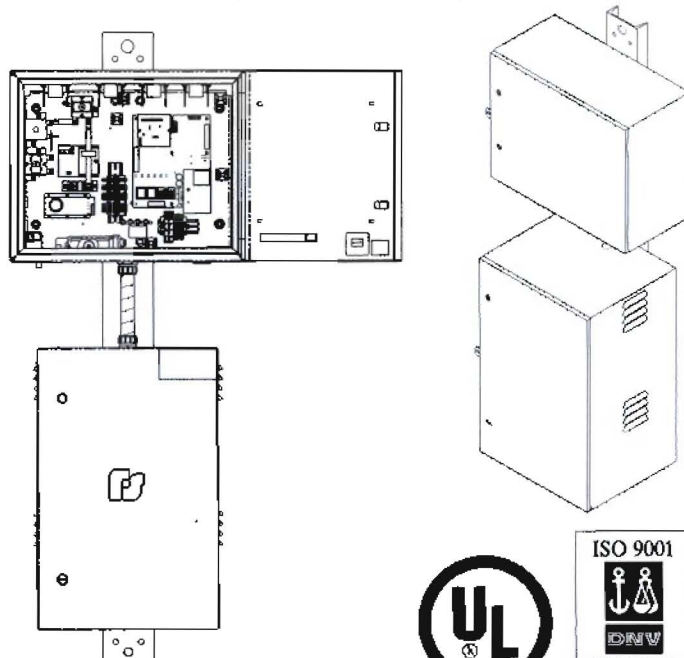
Controller Dimensions	
HxWxD	62.5" x 23.5" x 16.94" 1588mm x 597mm x 430mm NEMA 4X Rated
Battery Cabinet Dimensions	
HxWxD	18" x 28" x 15.19" 457mm x 711mm x 386mm Vented NEMA 4X Rated
Shipping Weight	
Approx. Shipping Weight	300 lbs. (136.36 kg)
Actual Weight	234 lbs. (106.3 kg)
2001TR: AC Primary Operation	
Operating Voltage	208/220/240 VAC single phase
Current Requirements	30 Amps. (approx.)
Dimensions	23"x11"x10" (584mm x 279mm x 254mm)
Weight	150 lbs. (68.2 kg)
Order information	
DCFCTB(D) <sup>1,2</sup>	Two-way Federal Controller
DCFCTB(D)H <sup>1,2</sup>	Two-way Federal Controller, high band 136-174 MHz
DCFCTB(D)U <sup>1,2</sup>	Two-way Federal Controller, UHF band 450-470 MHz
DCFCTB(D)-IP <sup>1,3</sup>	IP-enabled two-way electro-mechanical controller
Options	
FSPWARE	Federal Programming Software (Non-Digital Applications)
SFCDWARE	Federal Commander Digital Software (See literature for details)
Q-DC-IP <sup>1,3</sup>	Retrofit kit to upgrade existing controller to IP
EAS	Origination, activation and location codes

(D) Indicates digital Federal Controller two-way

<sup>1</sup> For use with 2001-130 and Eclipse siren series

<sup>2</sup> Antenna and cable are not included with radio activation control and must be ordered separately.

<sup>3</sup> Broadband radio and Codespear software sold separately.



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# SS2000 ENCODER

## > Features

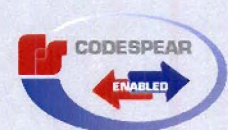
- Available for both DTMF and FSK Encoding
- Large, 4-line, back-lit display
- 18 hot command function keys
- Fully field programmable
- Built-in speaker and microphone jack
- Desk and 19" rack-mount versions available



Federal Signal's SS2000 encoder is a versatile, user-friendly control unit. Available in one-way control and two-way status monitoring, the controller is offered in DTMF or FSK formats. Encoded command sequences are field programmable and stored in memory for retention even when electrical power is removed. Federal Signal's SSLOADER offers an easy Windows-based software package for configuring the encoder's command sequences and operating parameters.

This easy to use activation unit offers (18) hot-keys and a four-line, back-lit LCD display which provides clear instruction to the operator.

The SS2000T (two-way DTMF) model can function as a stand-alone encoder or connect to an optional printer for reporting on all two-way controlled remote siren sites. Reports indicate siren site number, type of siren, detailed status of siren, and time and date of the report. The SS2000D (Digital/FSK) model can be connected to a Windows XP computer running Federal's SFCDWARE for utilization of the graphic user interface to control and monitor the siren system.



## > Specifications

### Select Model

<b>SS2000</b>	One-way, DTMF encoder, desk mount
<b>SS2000R</b>	One-way, DTMF encoder, 19" rack mount
<b>SS2000T</b>	Two-way, DTMF encoder, desk mount
<b>SS2000TR</b>	Two-way, DTMF encoder, 19" rack mount
<b>SS2000D</b>	Two-way, FSK encoder, desk mount
<b>SS2000DR</b>	Two-way, FSK encoder, 19" rack mount
<b>SSP</b>	Printer and cable
<b>MNC-MC</b>	Handheld microphone

### Configuration Software

SSLOADER™ operating system  
Windows 98, 2000, XP Compatible

### Dimensions (Desk Mount)

Height x Width x Depth:  
11.6" x 10.25" x 4.2" (29.5cm x 26.1cm x 10.7cm)

### Weight (Desk Mount)

Shipping Weight: 6 lbs. (3 kg)

### Dimensions (Rack Mount)

Height x Width x Depth:  
19" x 10" x 5.2" (48.5cm x 25.5cm x 13.2cm)

### Weight (Rack Mount)

Shipping Weight: 8 lbs. (4 kg)

### Environmental

Operating Temperature: 0° to 50°C

Specifications	
Line Input	120 VAC wall transformer power supply
Battery Input	11.5 - 20 VDC (over voltage and reverse voltage protection)
Power Supply Input Voltage	11.5-20 VDC (14.5 VDC typical)
Input Current	400mADC (MAX, 15 mA typical)
Distortion	< 3.0%
Encode/Decode Format	
DTMF Format	3-20 standard DTMF characters
DTMF Timing	35/5 to 1000/1000 (digit duration/inter digit silence)
MSK	1200 BAUD (MSK is minimal shift keyed digital format)
Carrier Detect	Active High 4.5 - 14 VDC Active Low 0 - 3.0 VDC
VOX	-35dbm to 0dbm
Parallel Port	IBM compatible printer port
Serial Port Protocol	RS232 9600 BAUD, N,8,1 (Xmodem Standard)
Speaker	
Power	1 watt
Impedance	8 ohms
Microphone	
Input Level	10mv - 100mv PTP
Input Impedance	12K ohms
Input Jack	1/4" TRS
TIP	Audio
Ring	PTT
Shield	Ground
Audio Interface	
Audio Output	Balanced 600 ohm, -55dbm to 0dbm
Audio Input	Balanced 600 ohm, -35dbm to 0dbm
Decode Sensitivity	< 8-10 dB(C) S/N or 12 dB(C) SINAD
Relay Outputs	3 DPDT 1.25A at 24 VDC 0.4 A at 120 VAC



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# FEDERAL CONTROLLER TWO-WAY

The Federal Controller two-way (model FCTB) will control and monitor any electro-mechanical siren, and may be used in conjunction with the SS2000 encoder located at a central command point. The FCTB will automatically report any change in status of the AC, low battery and intrusion sensor inputs back to the SS2000 while the siren is not sounding. The system may be polled via the SS2000 at any time for current status conditions. The FCTB offers the ability to monitor six remote sensor inputs, such as: AC power, low battery, up to three additional sensors to monitor siren motor operation. The FCTB is packaged in a NEMA 4 weatherproof cabinet and comes equipped with power supply, gel battery, processor unit, radio transceiver and AC power surge protection.

The FCTB is field programmable through an RS232 port. This enables the user to change activation code formats and signal timing. Programming is accomplished by using the FSPWARE that can be purchased separately. The digital FCTB series is programmable over the air, and includes a "digipeat" system feature that automatically seeks and recalls the best means of transmitting data to the central control by using the siren sites as radio repeaters. This feature can greatly reduce the costs of RF infrastructure required for the system.

The FCTB is an ideal choice for upgrading or retrofitting one-way controls to two-way status monitoring for use with existing electro-mechanical sirens like the Federal Signal 2001-130 siren, Eclipse siren series and the Model 2 siren.

## > Features

- Six remote sensor inputs
- Two-way control and status monitoring
- Interface with PA systems, voice capable fire alarm systems and telephone alerting systems
- Programmable codes and timing
- Push buttons for local activation
- Built-in tone generator for local tones or public address features
- Internal battery back-up
- UL listed



## > Specifications

### Select Model

- FCTB(D)<sup>1,2</sup>** Two-way Federal Controller  
**FCTB(D)L<sup>1,2</sup>** Two-way Federal Controller, low band  
 30-45 MHz  
**FCTB(D)H<sup>1,2</sup>** Two-way Federal Controller, high band  
 148-174 MHz  
**FCTB(D)U<sup>1,2</sup>** Two-way Federal Controller, UHF band  
 450-470 MHz  
**FCTB(D)-IP<sup>1,3</sup>** IP-enabled, two-way electromechanical  
 controller

(D)-Indicates digital Federal Controller two-way

<sup>1</sup>For use with 2001-130 and Eclipse siren series.

<sup>2</sup>Antenna and cable are not included with radio activation control and must be ordered separately.

<sup>3</sup>Broadband radio and Codespear software sold separately.

### Options

- FSPWARE** Federal programming software (non-digital applications)  
**SFCDWARE** Federal Commander digital software (see literature for details)  
**FS-PL** Private line tone and digital coded squelch encoder and decoder  
**SINAD** Signal-to-noise ratio monitor

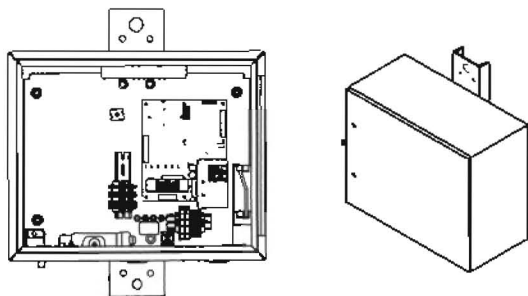
Sensor kits for Federal Controllers with two-way status monitoring

### Select the sensor that matches your siren motor type and number

- SK-SM** Single motor AC current sensor  
**SK-3M** Three motor AC current sensor

Select the sensor that matches your voltage and phase

- SK3-240** 3-phase, 240v AC voltage sensor  
**SK3-480** 3-phase, 480v AC voltage sensor  
**SK1-120** Single phase, 120v AC voltage sensor  
**SK1-240** Single phase, 240v AC voltage sensor



Electrical Specifications	
AC Supply Voltage	120 VAC @ 3.0 amps
Current Draw	240v AC @ 1.5 amps +/- 10%, 50/60 Hz, maximum standby current
Power Supply	10A @ 13.3 v DC, 2A @ 13.3 v DC
Battery Backup	12v DC 12A/H standby
Current Draw	< 600 Ma. amps in standby
Serial Ports	
Serial Port Protocol	RS232C 600, N, 8, 1
Transceivers Specifications	
	Programmable frequency: power out and private line options. For further details consult the Motorola product manual.
Signaling Formats	
FSK	1200 baud, MSK modem type Usable decode sensitivity: 10dB(C) SINAD (min.)
DTMF	3-12 standard DTMF characters
Relay Outputs	
4 relay outputs	SPST
Contract Rating	(2 relays standard, 4 relays max.) 3A @ 30v DC 7A @ 250v AC
Audio Output	
Output Voltage	>2V Peak to Peak
Maximum Load	8 Ohm
Total Harmonic Distortion	<10% @ 1kHz sinewave
Environmental	
Operating Temperature	-30°C to 65°C
Humidity	0-98% non-condensing
Controller Dimensions	
HxWxD	62.5" x 23.5" x 16.94" 1588mm x 597mm x 430mm NEMA 4X rated
Battery Cabinet Dimensions	
HxWxD	20" X 20" 12" 50.8cm X 50.8cm X 30.48cm Vented NEMA 4X rated
Shipping Weight	
	155 lbs. (approx.)

**FEDERAL SIGNAL**  
 Public Safety Systems

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 800.548.7229 • federalwarningsystems.com

For more public safety information, visit [federalsignal.com/publicsafety](http://federalsignal.com/publicsafety)

