

► Model DCFC

Two-Way Digital Controller

DC controller for the 48VDC sirens series

Federal Signal DCFC 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 Eclipse sirens. The DCFC siren controller typically interfaces with off-the-shelf two-way radio transceivers and communicates to a base controller. DCFC 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 DCFC controllers can be equipped with optional communications such as landline, IP, fiber, satellite, and cellular. This makes DCFC 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.

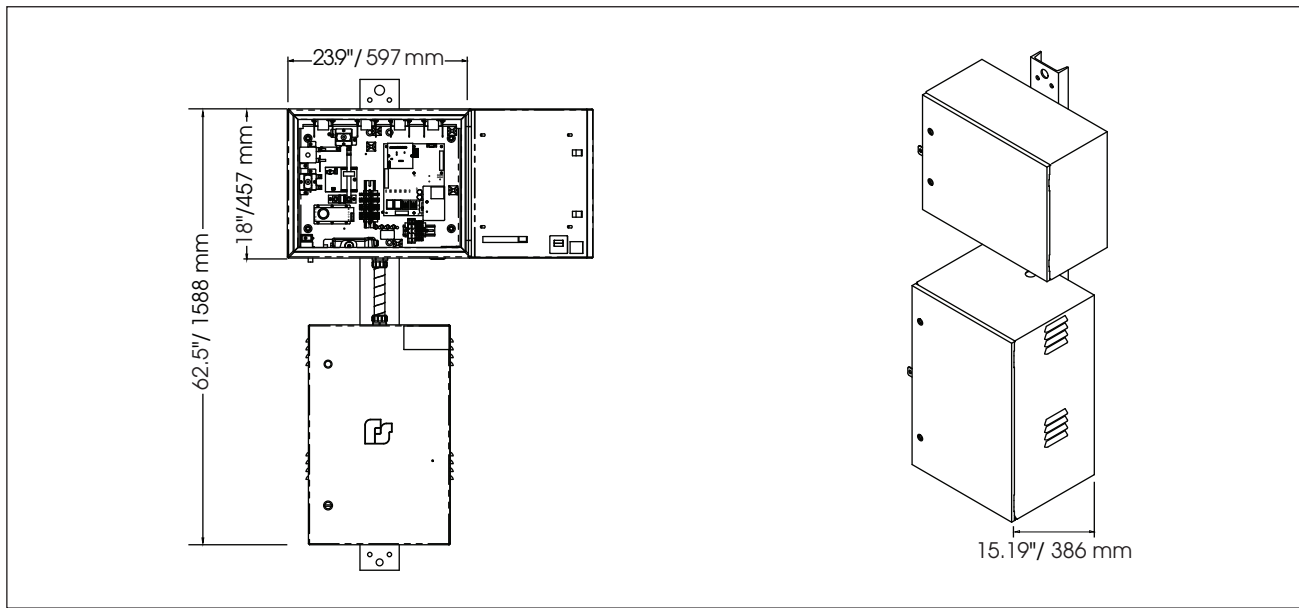
DCFC models come equipped with four independent relay outputs that can be programmed to activate with local inputs, local pushbuttons or via the communications channels. Activation codes, relay timing, and optional warning sounds are programmed into the unit through a standard RS232 serial port or over-the-air from the central control point. The DCFC 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.

F E A T U R E S

- 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, EAS, and POCSAG decoding.
- Push buttons for local activation
- UL Listed for general signaling



Two-Way Digital Controller (DCFC)



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

ELECTRICAL

AC supply voltage	120 VAC @ 4.0 Amps / 240VAC @ 2.0 Amps
Current Draw	+/- 10%, 50/60 Hz, maximum standby current
Power Supply	6A @ 13.3VDC
Battery Backup	48VDC
Current Draw	< .2 Amps in standby

SERIAL PORTS

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

Programmable Frequency	Power out and private line options. For further details consult Vertex® product manual.
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SIGNALING FORMAT

AFSK	1200 baud, MSK (Minimum Shift Key) modem type Usable decode sensitivity: 12dB SINAD (min.)
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DTMF	3-12 standard DTMF characters
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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.

EAS	Supports standard EAS codes and wildcards
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POCSAG	Supports binary AFSK 512 Baud numeric messages.
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RELAY OUTPUTS

4 relay outputs	SPST
Contact Rating (4 relays standard)	5A @ 28VDC – 5A @ 240VAC

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
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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.)

Actual Weight	300 lbs. (136.36 kg)
	234 lbs. (106.3 kg)

2001TR: AC PRIMARY OPERATION

Operating Voltage	208/220/240VAC single phase
Current Requirements	30 Amps (approx.)
Dimensions	23"x11"x10" (584mm x 279mm x 254mm)
Product Weight	150 lbs. (68.2 kg)

H O W T O O R D E R

- Specify Model:
 - DCFCTBD**^{1,2} – Two-way Federal Controller
 - DCFCTBDH**^{1,2} – Two-way Federal Controller, high band 136-174 MHz
 - DCFCTBDU**^{1,2} – Two-way Federal Controller, UHF band 403-470 MHz
 - DCFCTBD-IP**^{1,3} – IP-enabled two-way electro-mechanical controller
- Specify Options:
 - FSPWARE** – Federal programming software (Non-digital applications)
 - SFCWARE** – Federal Commander Digital Software (See literature for details)
 - ES-PROG-DTMF** – Two-way DTMF Programming

¹ For use with 2001-130 and Eclipse8 siren series.

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

³ Broadband radio and SmartMsg software sold separately.

