

# DCFCTBD DC Two-Way Digital Controller

## Features

- **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**



The Federal Signal DCFCTBD is a two-way digital, 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 AFSK signaling. In addition to AFSK, the controllers will simultaneously decode any combination of single-tone, two-tone sequential, DTMF, POCSAG and EAS formats for activation. This makes the two-way controller compatible with virtually any existing siren control system.

All DCFCTBD models come equipped with four independent relay outputs that can be programmed to activate with various codes. There are four landline inputs and four local push buttons for activation, plus reset. 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 offers six 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 intrusion, siren rotation and local activation.



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## Specifications

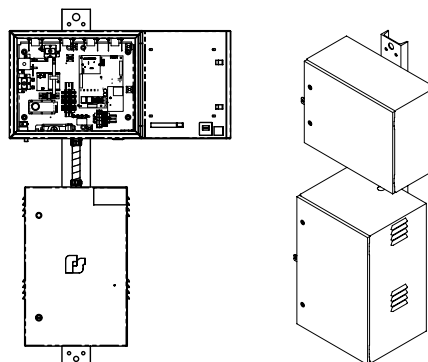
Electrical	
AC supply voltage	120 VAC @ 4.0 Amps
Current Draw	+/- 10%, 50/60 Hz, maximum standby current
Power Supply	6A @ 13.3VDC
Battery Backup	48VDC
Current Draw	< .2 Amps in standby
Serial Ports	
Serial Port Protocol	RS232C 1200, N, 8, 1
Transceiver	
Programmable Frequency	Power Out and Private Line options. For further details consult the Motorola® product Manual.
Signaling Format	
AFSK	1200 baud, MSK (Minimum Shift Key) 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.
EAS	Supports standard EAS codes and wildcards
POCSAG	Supports binary AFSK 512 Baud numeric messages.
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

Controller Dimensions (with battery cabinet)	
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)
Product Weight	150 lbs. (68.2 kg)
Order information	
DCFCTBD <sup>1,2</sup>	Two-way Federal Controller
DCFCTBDH <sup>1,2</sup>	Two-way Federal Controller, high band 136-174 MHz
DCFCTBDU <sup>1,2</sup>	Two-way Federal Controller, UHF band 403-470 MHz
DCFCTBD-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
ES-PROG-DTMF	Two-Way DTMF Programming

<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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