



# ACFCTB AC ONLY TWO-WAY DIGITAL CONTROLLER

## > Features

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 four (4) 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.

- 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	(4 relays standard) 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 srogramming software (Non-digital applications)
SFCDWARE	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.

