

# Federal Controller One-Way

## Features

- **Remote radio control function available**
- **Two-tone sequential, DTMF, EAS, POCSAG, and digital AFSK decoding**
- **Four individually programmable output relays**
- **Six built in siren tone signals**
- **Push buttons for local activation**



The Federal Controller, model FC, is a radio receiver/decoder and timer with relay outputs. This versatile model is ideal for virtually all siren control applications and any other process that can be controlled via relay contacts.

Options include a synthesized radio receiver (low band, high band or UHF), a built-in tone generator, which adds six standard tones, public address capability, and FSPWARE, a software package that enables connection to a computer to modify supplied timing or to create unique tone patterns. Programming options include radio receiver frequency, two-tone sequential tones/DTMF/AFSK decoding digits, custom audible signal tones and independent control of output relays and timing patterns for electro-mechanical sirens.

Up to six control codes may be programmed and activated by any combination of two-tone sequential, DTMF, EAS, POCSAG, and digital AFSK. Four of the timing sequences can be initiated using local push buttons or remotely through dry contact closures.

The Federal Controller is an ideal choice to control applications such as:

- Control of Federal Signal 2001-130, Eclipse and Model 2 siren series
- Adding or replacing radio controls for existing sirens
- Radio activation of indoor PA systems
- Control of warning lights or various warning equipment
- Fire house alerting applications



*Advancing security and well being.*

# Federal Controller One-Way Specifications

## Electrical Specifications

AC Power Inputs	120 or 240 VAC 50-60 Hz
Battery Input	
12 VDC Battery Input	11-15 VDC @ JP5-2
48 VDC Battery Input	14-60 VDC @ JP5-4
Input Current @ 120VAC	180 mA AC (MAX)
Input Current @ 12 VDC	460 mA DC (MAX)
Relay Outputs	SPST (4 relays standard) 5A @ 30VDC, 7 A @ 240VAC)
Relay Output Timings	0.5 to 999 seconds

## Receiver / Decoder

Frequency Range (MHz)	30-50	150-174	450-470
Intermodulation Rejection per EIA-603, part 4.1.9	≥-70	≥-70	≥-70
Adjacent Channel Selectivity per EIA-603, 4.1.6	≥-70	≥-70	≥-70
Spurious Response and Image Rejection (dBm) per EIA-603, part 4.1.8	≥-70	≥-70	≥-70
Frequency spread allowance without re-tuning (MHz)	+/-4.9	+/-1.5	+/-8.0
Sensitivity	0.35 uV for 12db(C) SINAD		
Stability	5.0 ppm		
Antenna impedance	50 Ohms, +/- 10 Ohms		
Decode sensitivity	20 dB(C) S/N (typically found at 0.5 uV of RF)		

## DTMF

Format	50/50 to 1000/1000 in milliseconds (digit duration/inter-digit silence)
Digit length	3-12 standard DTMF characters

## Two-Tone SEQUENTIAL

Timing	0.5 seconds (minimum) to 8 seconds (maximum) duration each tone
Intertone silence	0.4 seconds maximum
Frequency range	300 - 3000 Hz
Tone accuracy	+/- 1.5 %
Serial port configuration	RS232C 1200,N,2,1,DCE
Tone generator (specify when ordering)	
Audio output	0.25 watt RMS into an 8 Ohm load (adjustable)
AFSK	1200 baud, MSK (Minimum Key Shift) modem type Usable decode sensitivity: 10db(C) SINAD (Min.)

## Environmental

Operating temperature	-30°C to +60°C
Enclosure	NEMA 4

## Dimensions

Height X Width X Depth	14.25" x 3.25" X 5.5" (34.6 cm x 23.5 cm x 14.0 cm)
Shipping weight	10 lbs (5 kg)

## Select Model

One-Way Radio Activation	
FC*	Federal Controller
DCFCB*	DC Federal Controller

\*Add "L" for low-band (30-50 MHz), "H" for high-band (150-174 MHz), "U" for UHF (450-470 MHz)

## Options

FSPWARE	Federal Controller programming software
FS-PL1	Tone coded and digital coded squelch decoder (>40 Hz)
FS-PL2	Tone coded and digital coded squelch decoder (< 400 Hz)