Federal Controller One-Way

Control and Activation of Remote Equipment

- **Radio control available**
- **Two-tone sequential, DTMF, EAS, POCSAG, and digital AFSK decoding for security**
- **Four individually programmable output relays**
- **Six built in siren tone signals**
- **Push buttons for local activation**
- **Low current draw**

The Federal Controller, model FC, is a remote control activation point for control of equipment with timer and relay outputs. Optional radio/receiver decoder is available. 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 (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 on/off patterns for control of external equipment, such as sirens. Programming options via FSPWARE include radio receiver frequency, two-tone sequential tones/DTMF/AFSK decoding digits for security, 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 use of SFCD Software and SS2000+ allows remote control activation and networking of multiple FC Controllers.

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

- Control of Federal Signal 2001 Series, 508, Eclipse8 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

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DATA SHEET

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	300 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) Intermodulation Rejection per EIA-603, part 4.1.9	150-174 $\geq$-70	450-470 $\geq$-70
Adjacent Channel Selectivity per EIA-603, 4.1.6	$\geq$-70	$\geq$-70
Spurious Response and Image Rejection (dBm) per EIA-603, part 4.1.8	$\geq$-70	$\geq$-70
Frequency spread allowance without re-turning (MHz)	+/-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	-30ºC to +60ºC
Enclosure	NEMA 4

Dimensions

Height X Width X Depth	14.25 x 9.25 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 One-way (Control only)
DCFCB*[1]	Federal Controller One-way (Includes battery cabinet)

*"H" for high-band (150-174 MHz), "U" for UHF (450-470 MHz)
  [1]Batteries not included.

Options

FSPWARE	FC programming software
FS-PL1	Tone coded and digital coded squelch decoder
SS2000+	Stand-alone control unit
SFCD10/25/255/512	Application software for control of FC Controllers
2001-AC	240AC power converter and 48VDC contactors for siren activation

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