



# Series FX-1500v4 Toxic Gas Detectors

The Foxcroft FX-1500v4 toxic gas detector, relied on for over 20 years, now features the simplest, most user friendly interface available.

There is no need to disassemble the detector for configuration, to look up code numbers in tables, or to set DIP switches and jumpers. Simply tap the buttons on the glass touch screen to configure the relays.

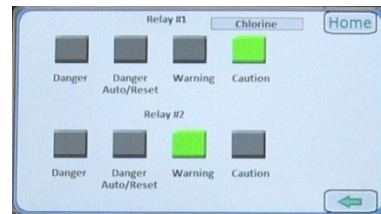
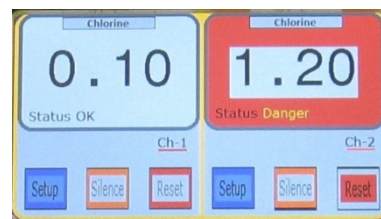
It can detect and alert you to minute levels of chlorine, ammonia, sulfur dioxide, low oxygen and other gases.

The microprocessor can accept software upgrades and feature enhancements.

Sound design and rugged high quality components deliver the long service life and dependability you need in a safety device.

## Features

- Remote display with one or two gas sensors
- Crystal clear 4.3" full color glass touch screen interface displays concentration, alarm status and onscreen configuration. Rated 1 million touches.
- High visibility 1" x 1.75" minimum alarm status fields, color coded for sensor status, alarm level and sensor fail for each channel.
- Universal AC input 24VDC power supply, no voltage selection needed. Optional 24VDC battery power for remote locations.
- Dependable 3-electrode electrochemical gas sensor combines fuel cell technology with a diffusion limited barrier, providing low maintenance, quick response and stability for long periods of time.
- (3) Gas alarm levels, non-adjustable to prevent erroneous level entry, set to OSHA, NIOSH and ACGIH recommendations
- (1) 4-20mA output per channel, auto scaled to sensor range, for SCADA or network monitoring
- (4) 10A form C Alarm relays per channel and (1) Sensor fail relay, 1A form C per channel



# Technical Data, Series FX-1500<sub>v</sub>4



## Gas Sensor

3-Electrode, electrochemical fuel cell

### Response Time (T<sub>90</sub>)

<60 Seconds at 20°C. Typically <8 seconds to full alarm

**Accuracy:** 0.1 PPM (@20 degree C)

**Resolution:** 0.1 PPM

**Long-term Sensitivity Drift:** <2% signal loss per month

**Temperature Range:** -20°C to +50°C (-4°F to 122°F)

**Humidity Range:** 15 - 90 % (non-condensing)

### Three Gas Alarm Levels, Non-Adjustable

Danger, Warning (set at OSHA, NIOSH and ACGIH recommendation), Caution. Non-standard alarm levels and operating ranges available optionally

### Sensor Fail Alarm

Indicates loss of sensor input >30 seconds or a break in the sensor circuit

### Visual Concentration, Status & Alarm Indication

3/8" high numeric concentration display. Both text description and color coded 1" x 1.75" minimum alarm status fields for each gas alarm level and sensor fail. White=OK, Yellow=Warning, Orange=Red, Sensor Fail=Blue, Red LED on the local sensor enclosure.

**Audible Alarm Notification:** 100 dB piezo buzzer

### Separate Silence & Reset Buttons

Displayed on the touch screen to silence the buzzer, reset the relays and alarm status if gas is below alarm levels.

**Operating Voltage:** Filtered 24VDC

### Power Supply

88-264 Volts AC, 50/60 Hz input, switching, 2.2A, 52.8W, no voltage selection is required

24VDC battery powered optional, 20VDC minimum to energize relays

### Power Connection

6A fused IEC #320-C14 inlet power input module, includes detachable 2-meter power cord with IEC #320-C13 and NEMA 5-15 connectors

**Power Consumption:** <10 watts

## Display

4.3" Resistive full color glass LCD touch screen, 480 x 272 screen resolution, 4MB flash memory, rated 1 million touches on any one point. Adjustable brightness. Weather resistant sealing.

### Sensor Cable

25-foot standard, up to 2,000 ft available, 22Ga, 4-conductor shielded cable

### 4-20 mA Retransmission Output

(1) 4-20mA for each channel, auto scaled to sensor range, into 750 Ohms max, diode protected to 50VDC, 2-wire

### Serial Output

RS-485 serial port (inactive as standard)

### Relay Configuration

Configure via touch screen pushbutton without reference to lookup tables, without DIP switch or jumper setting, and without detector disassembly.

### Gas Alarm Relays

(4) 24VDC Form C per each measurement channel. 10A @125 VAC, 7A @250VAC; 7A @ 28VDC resistive.

(Two are factory-set Danger & manual reset, two are totally configurable as manual or auto reset to any alarm level)

### Sensor Fail Relays

(1) 5 VDC Form C per each channel, 1A @24VDC resistive, auto reset

### Alarm Setup

Onscreen page display of default gas alarm levels

### Gas Sensor Life Display

Onscreen display of sensor life start and expiration dates

### Remote Silence, Reset, Test Buttons

Onscreen buttons for each channel to silence buzzer, reset relays and test sensor circuitry. Test button does not test gas sensing ability of the sensor

# Technical Data, Series FX-1500v4



## Local Test Button

Normally closed switch on local sensor enclosure to test sensor circuitry, *this does not test gas sensing ability of the sensor*

## Remote Reset

Input terminal provided to reset the detector using a remote NC switch

## Screen Settings

Onscreen adjustment of screen volume and brightness

## Microprocessor Controlled Electronics

### Remote Main Enclosure

Indoor or outdoor wall mount NEMA 4X, 9" wide x 11" high x 6" deep; spacious for ease in wiring. Sunscreen recommended for the display for outdoor mounting.

### Local Sensor Enclosure

NEMA 4X, 4" x 4" on 7" square wall mount plate

### Battery Powered UPS

A separate external battery backup / UPS is available for power loss or for locations with unreliable power.

Part #FX-BB110

### Sun / Weather Guard

A sun / weather guard is available to protect the touch screen which can be damaged by exposure to direct sunlight.

Part #FX-1500SG

## Order Numbers

Single channel model FX-1500v4-X

Dual channel model FX-1502-X-X

X=gas sensor order code

## Gas Sensors Available

Gas	Standard Range	Order Code
Chlorine	0-10 ppm	CL2
Sulfur Dioxide	0-10 ppm	SO2
Ammonia	0-100 ppm	NH3
Oxygen	0-25%	O2
Carbon Monoxide	0-500 ppm	CO
Chlorine Dioxide	0-1 ppm	CLO2
Hydrogen Sulfide	0-10 ppm	H2S
Ozone	0-2 ppm	O3
Nitric Oxide	0-50 ppm	NO
Nitrogen Dioxide	0-10 ppm	NO2
Hydrogen Cyanide	0-10 ppm	HCN
Hydrogen Chloride	0-10 ppm	HCl

Other gas ranges and non-standard alarm levels are available optionally.