



Series FX-1500_{v4} 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 SPDT form C Alarm relays per channel and (1) Sensor fail relay, 1A SPDT form C per channel



Single Channel FX-1500v4



Dual Channel FX-1502v4

Technical Data, Foxcroft Series

FX-1500_v4 Gas Detector



Gas Sensor

3-Electrode, electrochemical fuel cell

Response Time (T90)

<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 >4 minutes 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=Caution, Warning=Orange, Red=Danger, 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-feet standard, up to 2,000 ft available, 22Ga, 4-conductor shielded cable

4-20 mA Retransmission Output

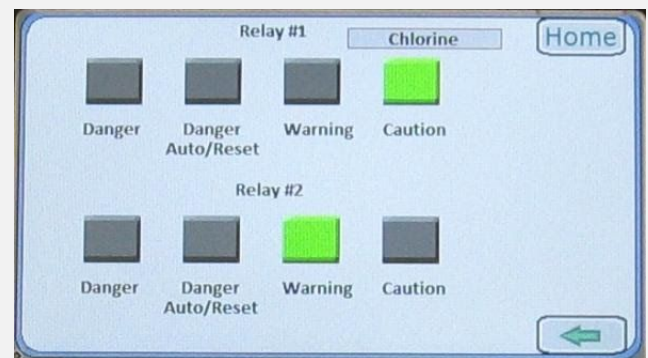
(1) 4-20mA for each channel, auto scaled to sensor range, into 750 Ohms max, diode protected to 50VDC, 2-wire

Serial Output

RS-485 serial port (inactive as standard)

Relay Configuration

Configure via touch screen pushbuttons without reference to lookup tables, without setting DIP switches or jumpers and without detector disassembly.



Gas Alarm Relays

(4) 10A SPDT Form C relays per measurement channel in FX-1500 & FX-1502. Rated 10A @125 VAC, 7A @250VAC; 7A @ 28VDC resistive, onboard LED indicators.

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

Sensor Fail Relays

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

Alarm Setup Onscreen page display of default gas alarm levels

Technical Data, Foxcroft

Series FX-1500_v4 Gas Detector

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

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

8.2" x 9.7" IP67/NEMA 4X polycarbonate enclosure with UV stabilized polycarbonate clear door and hinged top panel.

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

Order Numbers

Single channel model FX-1500v4-X

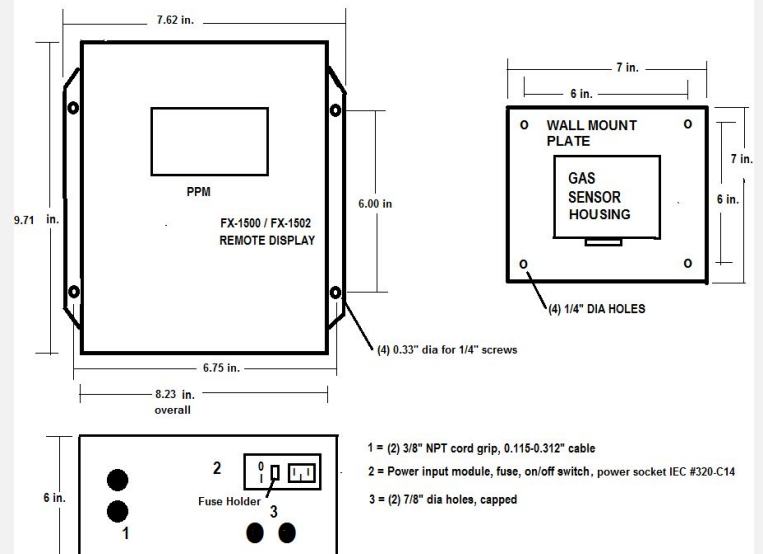
Dual channel model FX-1502v4-X-X

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

Foxcroft FX-1500v4 & FX-1502v4 Gas Detectors Dimensions



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

V4.9 changes: relay description only, added “onboard relay test buttons with LED indicators” and “two are configurable to latching danger or auto reset at any alarm level)”

Under Features change relay qty to (2-4)

V4.11 added new clear door enclosure photos, added SPDT to sensor fail relay desc. Added new enclosure dimensions and removed sun guard statement. Added dimensions diagram

V4.12 added yellow swing panel 1500, new 1502 yellow swing panel