

# COMBUSTIBLE GAS DETECTOR

## TIF8800

The TIF 8800 is a highly reliable broad-band combustible gas detector extremely useful as a general purpose tool in any environment where gasoline, propane, natural gas or fuel oil is used. In conjunction with specific carbon monoxide measuring equipment, it is a valuable adjunct in diagnosing heating system problems.

This instrument has many applications such as checking for arson, cracked heat exchangers, faulty, leaking automobile exhaust systems. This instrument provides a unique audible alarm signal that increases to a siren as the gas leak is approached.



CLASSIFIED BY UNDERWRITERS LABORATORIES INC.\* ONLY AS TO INTRINSIC SAFETY IN CLASS I, GROUPS A, B, C, & D, HAZARDOUS LOCATIONS.



TIF INSTRUMENTS, INC.  
MODEL NO TIF 8800  
PERMISSIBLE GAS DETECTOR

APPROVAL NO 2G-3668-0

TESTED FOR INTRINSIC SAFETY  
IN METHANE - AIR MIXTURES ONLY

WARNING: MSHA APPROVED FOR USE WITH SAFT PART NO 405421  
BATTERIES ONLY RECHARGE IN FRESH AIR ONLY  
NOT APPROVED FOR COMPLIANCE DETERMINATIONS REQUIRED  
BY 30 CFR, PART 75, SUBPART D

## SPECIFICATIONS

### FEATURES

- Automatic warm-up
- Audible "geiger counter" signal
- Adjustable sensitivity
- Cordless operation
- Low battery indicator
- Long, flexible probe
- Made in U.S.A.

### SPECIFICATIONS

Power supply:  
2(2.4V) Ni-Cad Batteries

Battery life: 4 hours

Sensitivity: 50-1500 ppm

Warm-up time: Automatic,  
Approximately 15 seconds.

Response time: Instantaneous.

Weight:  
15.5 ounces. (439 grams)

Dimensions: 8" x 3" x 1.8"  
(20.32 cm x 7.62 cm x 4.57 cm)

Duty cycle:  
Continuous

Operating temperature range:  
33° to 100°F. (0°C to 38°C)

Probe length: 15 inches/38.1 cm

### REPLACEMENT PARTS

Sensing Tip...Part #TIF8801  
Battery Recharger (115V only)  
Part #TIF8803A  
Carrying Case...Part #TIF8804  
Plug-in (Cigarette Lighter  
Recharger)...Part #8805  
2 (2.4V) Ni-Cad Batteries  
...Part #TIF8806A

### 8800 DETECTS

#### HYDROCARBONS

- Methane (Natural Gas)
- Ethane
- Propane
- Benzene
- Acetylene
- Butane
- N-Butane
- Isobutane
- Pentane
- Hexane
- Gasoline

#### HALOGENATED HYDROCARBONS

- Methyl Chloride
- Methylene Chloride
- Trichloroethane
- Vinyl Chloride

#### ALCOHOLS

- Methanol
- Ethanol
- Propanol
- Butanol

#### ETHERS

- Methyl Ether

#### KETONES

- Methyl Acetate
- Methyl Ethyl Ketone
- Acetone

#### OTHER GASES

- Sulfur Dioxide
- Ammonia
- Carbon Monoxide
- Hydrogen Sulfide
- Hydrogen
- Toluene
- Naptha
- Chlorine

#### CHEMICALS

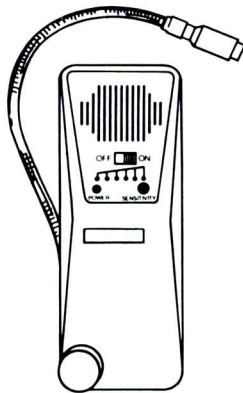
- Industrial Solvents
- Dry Cleaning Fluids
- Lacquer Thinners
- Refrigerant Gases

800-327-5060



3270 Executive Way  
Miramar, FL 33025

SEE BACK FOR APPLICATIONS AND DETECTABLE COMPOUNDS



# Applications:

- Detect Leaks in Automobile Exhaust and Fuel Systems.
- Detect Leaks in Liquid or Gas Fired Heating Systems.
- Safety Checks at Propane Filling Stations.
- Search for Arson Residue (Detects Accelerants).
- Detect fuel in Marine Bilges.
- Check Fuel Tanks Before Welding.
- Check Manholes/Sewers for Safety.
- Check for Cracked Heat Exchangers.
- Detect Solvent Residue.

## PARTIAL LIST OF DETECTABLE COMPOUNDS AND SENSITIVITY TO SELECTED ONES:

### HYDROCARBONS

- Methane (Natural Gas)
- Ethane
- Propane
- Benzene
- Acetylene
- Butane
- N-Butane
- Isobutane
- Pentane
- Hexane
- Gasoline

### HALOGENATED HYDROCARBONS

- Methyl Chloride
- Methylene Chloride
- Trichloroethane
- Vinyl Chloride

### ALCOHOLS

- Methanol
- Ethanol
- Propanol
- Butanol

### ETHERS

- Methyl Ether

### KEYTONES

- Methyl Acetate
- Acetone
- Methyl Ethel Ketone

### OTHER GASES

- Sulfur Dioxide
- Ammonia
- Carbon Monoxide
- Hydrogen Sulfide
- Hydrogen
- Toluene
- Naptha
- Chlorine

### CHEMICALS

- Industrial Solvents
- Dry Cleaning Fluids
- Lacquer Thinners
- Refrigerant Gases

	Molecular Formula	Minimum detectable Concentrations (ppm)											
		1	5	10	20	50	100	200	500	1000	2000		
<b>COMBUSTIBLE GASES</b>													
ACETYLENE	C <sub>3</sub> H <sub>6</sub> O												x
iso-BUTANE	C <sub>4</sub> H <sub>10</sub>												x
METHANE (Natural Gas)	CH <sub>4</sub>												x
ETHANE	C <sub>2</sub> H <sub>6</sub>												x
PROPANE	C <sub>3</sub> H <sub>8</sub>												x
ETHYLENE	C <sub>2</sub> H <sub>4</sub>												x
HYDROGEN	H <sub>2</sub>												x
METHYLETHER	C <sub>2</sub> H <sub>6</sub> O												x
<b>DERIVATIVES OF HYDROCARBONS</b>													
VINYL CHLORIDE	C <sub>2</sub> H <sub>3</sub> Cl		x										
METHYL CHLORIDE	CH <sub>3</sub> Cl		x										
METHYLENE CHLORIDE	CH <sub>2</sub> Cl <sub>2</sub>					x							
ETHYLENE OXIDE	C <sub>2</sub> H <sub>4</sub> O											x	
ACRYLONITRILE	C <sub>3</sub> H <sub>3</sub> N				x								
<b>OTHER GASES</b>													
HYDROGEN SULFIDE	H <sub>2</sub> S		x										
CARBON MONOXIDE	CO												x
SULFUR DIOXIDE	SO <sub>2</sub>							x					
CHLORINE	Cl <sub>2</sub>		x										
AMMONIA	NH <sub>3</sub>					x							
<b>LIQUID</b>													
ACETONE	C <sub>3</sub> H <sub>6</sub> O									x			
METHANOL	CH <sub>4</sub> O									x			
n-PENTANE	C <sub>5</sub> H <sub>12</sub>									x			
n-HEXANE	C <sub>6</sub> H <sub>14</sub>									x			
BENZENE	C <sub>6</sub> H <sub>6</sub>									x			
METHYLETHYL KETONE	C <sub>4</sub> H <sub>8</sub> O									x			
DIMETHYL AMINE	C <sub>2</sub> H <sub>7</sub> N									x			
ETHANOL	C <sub>2</sub> H <sub>6</sub> O									x			
METHYL ACETATE	C <sub>4</sub> H <sub>8</sub> O <sub>2</sub>									x			
GASOLINE	-----									x			