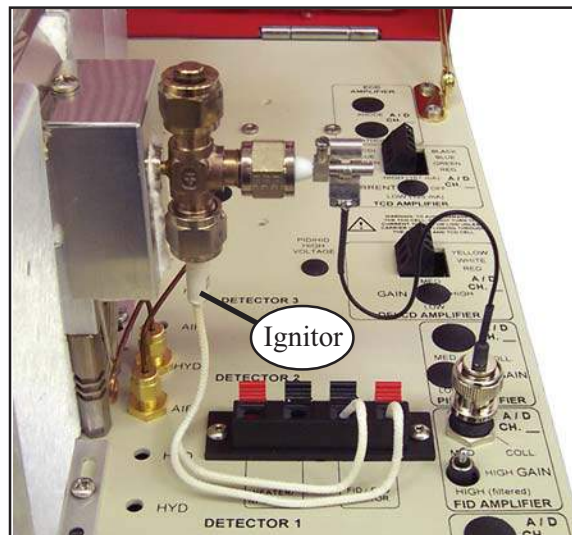
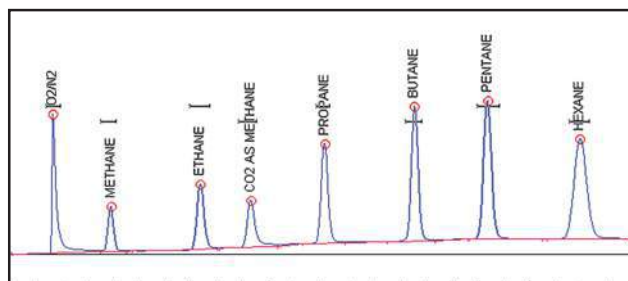


# FID - Flame Ionization Detector

- Hydrocarbon Selective
- Robust, Linear, Stable
- Detects Down to 1ppm
- Unique Ceramic Ignitor can run HOT continuously to keep flame lit



The Flame Ionization Detector is the most commonly used GC detector, responding linearly from its minimum detectable quantity of about 100 picograms to almost 100%.



This chromatogram shows 250ppm C<sub>1</sub>-C<sub>6</sub> hydrocarbons (methane through hexane) standard as detected by the FID. CO<sub>2</sub>, also at 250ppm, is converted to methane by the Methanizer accessory in the jet of the FID detector.

The FID responds to any molecule with a carbon-hydrogen bond, but not at all, or poorly, to compounds such as H<sub>2</sub>S, CCl<sub>4</sub> or NH<sub>3</sub>. The FID response is very stable from day to day, and is not susceptible to contamination from dirty samples or column bleed.

The SRI FID employs a unique ceramic ignitor which can run hot continuously, immediately reigniting the flame even when presented with large water injections or pressure surges from column backflush.

The FID is thermostatted in an aluminum block up to 600°C, and is equipped with an electrometer amplifier with HIGH, HI-FILTERED (for extra noise immunity), and MEDIUM gain settings. Hydrogen and air flow are controlled using Electronic Pressure Controllers (EPC) for high precision. The optional built-in, “whisper-quiet” air compressor can be used to supply the air for the FID, eliminating the bulky air cylinder.

If CO and CO<sub>2</sub> are target analytes, order our Methanizer accessory (page 74) for the FID detector. The Methanizer allows the FID to detect low levels of CO and CO<sub>2</sub> by converting them to methane without changing their retention times. Thermostatted to 380°C, the Methanizer is a special catalyst jet which can be removed for normal FID operation.

8690-0010	FID detector
8690-0082	Methanizer Jet for low level CO & CO <sub>2</sub>
8690-0070	Optional 115VAC 60Hz built-in “whisper quiet” air compressor
8690-2270	Optional 230VAC 50Hz built-in “whisper quiet” air compressor