

# Installation

The detector is usually mounted on top of the GC column oven. The power cord for the controller is 1.8 m (6') long; the detector cable and the signal output cables (attenuated and unattenuated) are 1.2 m (4') long.

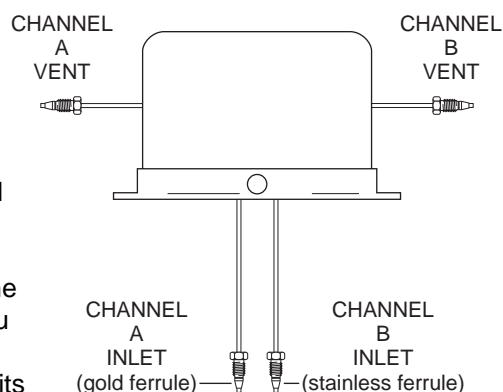
## General Precautions

- Do not turn the unit on until the carrier gas is flowing through the detector.
- Do not shut off or disconnect the carrier gas when the detector is hot, even if the unit is turned off. Turn off the power switch on the back of the controller and allow the detector to cool down naturally before disconnecting or shutting off the carrier gas.
- Position the controller unit where the mains switch on the rear panel can be reached easily.

## Mounting the Detector on the GC

### Vertical Mounting

The detector has no particular orientation requirements, but it should have adequate thermal isolation from the column oven and injection port. Most GCs have an existing opening which will allow the TCD2 to sit vertically on top of the column oven with the column inlet extending into the oven. If you are replacing an existing detector, you can usually just remove it and set the TCD2 in its place. If not, use a drill or chassis punch to drill a hole of the proper size, and set the detector in position.



**Figure 6:** Detector connections

While trying to match base plate mounting holes to every GC on the market is impractical, we have located the mounting holes so that at least two of them will coincide with existing holes on the GC. (Refer to **Figure 5**.)

Orient the detector to allow for easy cable and gas connections. The inlet lines installed into the detector must enter the column oven and permit column connection. Temperature loss between the column outlet and the detector should be minimized to prevent possible condensation of the sample.



**CAUTION:** Do not mount the detector near the column oven cool-down vents.

### Horizontal Mounting

Some older GCs have access to the column oven through the side of the GC. This does not present a problem as far as operation of the TCD2 is concerned. Drill a hole at the appropriate location, orient the detector for convenient connection, and mark the position of the mounting holes. Drill the mounting holes and secure the detector to the side of the GC with four sheet metal screws (not supplied).