



# TIF8100 R12 CONTAMINATION DETECTOR

## Operating Instructions



**NOTE:** This analyzer is intended for use with R12 Systems **ONLY**. The instrument assumes you are using it to identify pure R12 and it will fail any other refrigerant regardless of its purity. Acceptance of a sample **DOES NOT** mean said sample meets the standards of UL1963, ARI700, SAEJ1991 or other purity standards.

### SET UP

1. Connect the unit's power cord to a 115VAC/60Hz (220VAC/50Hz for Int'l) outlet.
2. Power on the unit by switching the Power switch to 'ON'.
3. The message "Preparing-Wait" will appear for 30 seconds as the unit warms up.
4. "Ready/Press Test" will be displayed, indicating the unit is ready for use.
5. Connect the supplied hose to the 'Refrigerant Inlet' on the face panel.

### TESTING

1. Connect the free end of the hose to the source of the refrigerant to be tested.
  - a) If testing a charged system, make certain the system is OFF and connect to the LOW side **ONLY**.
  - b) If testing a cylinder, connect to the VAPOR port **ONLY** (on single valve disposable cylinders, position the cylinder upright to sample vapor).

DO NOT SAMPLE LIQUID REFRIGERANT. Doing so will damage the unit and void the Warranty.
2. Press the 'Test Switch' button. If the message "Connect Hose" is displayed, either there is insufficient pressure (>20psig) in the source or the hose connection is not properly connected.
3. "Calibrating" will be displayed for 10 seconds.
4. "Analyzing" will be displayed for up to 20 seconds as the unit samples from the source.
5. Either "Acceptable R12" or "Contaminated R12" is displayed.

#### If "Acceptable R12" is detected:

1. "Acceptable R12" will remain displayed for 30 seconds.
2. "Ready/Press Test" will be displayed, indicating the unit is ready for another test.
3. If desired, another test can be performed by starting from **Step 2**, Testing, above, OR the Hose can be disconnected and the unit powered off.
4. Turn unit off by switching the Power switch to 'Off'.

#### If "Contaminated R12" is detected:

1. The audible ALARM will sound, and
2. The display will alternate every 2 seconds between "Contaminated R12" and "Purge Hose".
3. It is now necessary to disconnect the hose **FIRST** from the source, and second from the Analyzer.
4. Once the hose is disconnected, the message "Preparing-Wait" will be displayed for 30 seconds as the unit purges the contaminated sample.
5. "Ready/Press Test" will be displayed, indicating the unit is ready for another test.

6. If desired, another test can be performed by starting from **Step 1**, Testing, above, OR
7. Turn the unit off by switching the Power switch to 'Off'.

### Operating Hints

1. Follow the instructions on the face panel, below, regarding the OIL FILTER and its maintenance.
2. It is recommended that if contamination is detected, a second test be performed.
3. If the hose is disconnected, or pressure falls too low (>20psig), during a test cycle, the unit will revert to the start up mode and display "Preparing-Wait". This will last for 30 seconds and "Ready/Press Test" will be displayed, indicating the unit is once again ready for testing.
4. If "Service XX" code is displayed, contact Technical Assistance at 1-800-327-5060.
5. If the unit fails to power on when properly plugged into an outlet, and the Power switch is switched to 'On', check the fuse located on the back panel in the Storage compartment.

### Specifications

Detection Principle:	Infrared Spectrum Analysis
Sensor:	Patent Pending Acoustic IR Multi Wavelength Sensor with Intrinsic Filter
Sensitivity:	Less than 2% contamination detectable "Acceptable R12" displayed indicates at least 98% pure R12
Detectable contaminants:	CFC, HCFC and HFC refrigerants, plus all Hydrocarbons and blends of the two. Air, Oil and Moisture are <b>NOT</b> treated as contaminants.
Power Supply:	110-130VAC/60Hz (220VAC/50Hz for Int'l)
Fuse:	AGC1.5A/250V
Operating Temperature:	32° F to 125° F
Weight:	8.5 lbs.

## WARNING

Many alternative refrigerants are extremely **FLAMMABLE**.  
To avoid possible bodily injury or property damage, **DO NOT**  
expose "Contaminated R12" refrigerant to heat, fire or sparks.

### REPLACEMENT PARTS

Fuse (250V/1.5A) .....	Part # 8101
Connector Hose .....	Part # 8102
Oil Filter .....	Part # 8103
Oil Filter	
Hose Clamps (2) .....	Part # 8104



**Quality you can believe in.**  
TIF Instruments, Inc.  
9101 N.W. 7th Avenue, Miami, FL 33150  
1-800-327-5060 Fax: (305) 757-3105