

# Installation Instructions

---

## Interface Part Number 14-4188-086

Interfacing a Tekmar™ 2000/7000/3000/6000/Velocity XPT to a Hewlett-Packard 5890 with 5970 MSD or 5988 MS Unix or Pascal-Based Chemstations

---

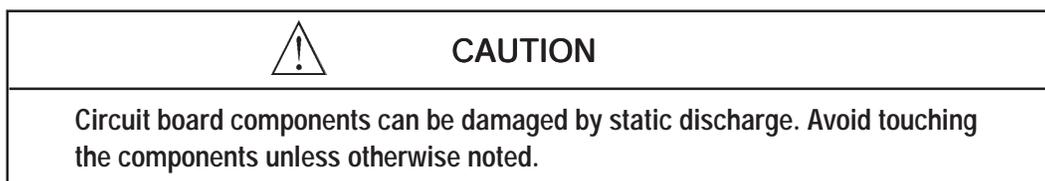
This interface allows the Tekmar unit to operate automatically with your Hewlett-Packard instruments. It allows the GC to send a READY signal to the Tekmar unit. Also, it enables the Tekmar unit to start the GC and data system upon sample transfer or injection.

### Accessory Requirements

If you have a Pascal or Unix-based Chemstation, you need HP's *Internal Accessory Cable* (HP P/N 05987-60158) to use this interface. The Pascal-based Chemstation also requires the *A111 Internal Accessory Card* (HP P/N 05990-60111). These items may need to be installed by an authorized HP service representative.

### Adjustments

For the interface to work properly, the switches on the 2000/7000 input/output (I/O) board need to be set as shown in the diagram included with these instructions. You do **not** need to set switches for the 3000 or 6000; you set up the interface through software. See the following instructions for your particular unit.



### Connection to the LSC 2000

1. To access and set the switches:
  - a. Locate the I/O board. It has two connectors extending out of its bracket, which can be accessed at the rear of the LSC 2000. (See the photograph in Section 12 of your Purge and Trap Concentrator User Manual.)
  - b. Loosen the two screws that hold the I/O board and slide it out until you see the switches labeled "U012" and "U013".
  - c. Set the switches according to the diagram included with these instructions. (The switches are in the OPEN position when they are pressed **down** at the "OPEN" label.)
  - d. Return the I/O board to its original place, being careful to properly seat it into its connector.
2. Plug the 25-pin connector into the I/O board.

### Connection to the 7000

1. To access and set the switches:
  - a. Loosen the two 1/4-turn fasteners on the lower left side panel.

Tekmar™ 2000/7000/3000/6000/Velocity XPT to an HP 5890 with 5970 MSD or 5988 MS with Unix or Pascal-Based Chemstations (continued)

---

### ***Connection to the 7000 (continued)***

- b. To remove the panel, pull it **away** from the unit to release the retaining clips from the posts in the chassis, then toward the **front** of the unit to release it from the locating pins (on the rear of the unit).
  - c. There are three sets of four DIP switches on the edge of the board. They are labeled BIAS, OUTPUT and INPUT. Set the switches according to the diagram included with these instructions. (Flip the switches **up** to put them in the OPEN position.)
  - d. Reinstall the left side panel by pressing it back onto the locating pins and inserting the retaining clips into the posts in the chassis.
  - e. Secure the panel with the two 1/4-turn fasteners.
2. The I/O board has two connectors extending out of its bracket, which can be accessed at the rear of the 7000. Plug the 25-pin connector into the I/O board.

### ***Connection to the 3000 , 6000, Velocity XPT***

1. Turn off the Tekmar unit.
2. Locate the Tekmar unit's interface board. The board has two connectors extending out of its bracket. These connectors can be accessed at the rear of the Tekmar unit.
3. Plug the 25-pin connector from the Tekmar cable into the matching connector on the interface board.

### ***Specifying the GC Port (3000 ,6000 , Velocity XPT only)***

1. Turn on the Tekmar unit.
2. At the System Error/System Reset Screen, press the ENTER key.
3. Allow the system to run through the automatic self-test.
4. At the Standby Screen, press the CONF key. The Configuration Screen appears on the display.
5. At the Configuration Screen, press A (GC I/O Port). The GC Port Screen appears on the display.
6. Choose the GC Port. You have two choices: *Standard* or *User*. Choose **Standard**. Press any numeric key to cause the display to toggle from one choice to another. Press ENTER to save your selection.
7. Turn off the Tekmar unit.

### ***Connection to the GC***

1. Remove the right top instrument cover on the GC.
2. Locate the receptacle labeled "Remote". On the Unix-based Chemstation, a cable is connected to this receptacle. Visually follow this cable. Its opposite end attaches to the rear panel of the 5970 MSD. Disconnect and remove this cable.
3. Connect the 12-pin plug from the Tekmar cable into the receptacle labeled "Remote".
4. Coil the Tekmar cable partially around the strain relief posts and route it out the rear of the GC.
5. Replace the cover.

### ***Connection to the MSD with Unix-Based Chemstation***

1. One end of the Tekmar cable ends in a 9-pin connector. Attach this connector to the 9-pin receptacle on the rear of the MS.
2. Another end of the Tekmar cable ends in a 36-pin connector. Attach this connector to the connector labeled "Accessory Control" on the rear of the 5970 MSD.

Tekmar™ 2000/7000/3000/6000/Velocity XPT to an HP 5890 with 5970 MSD or 5988 MS Unix or Pascal-Based Chemstations (continued)

---

### ***Connection to the MSD/MS with Pascal-Based Chemstation***

1. One end of the Tekmar cable ends in a 36-pin connector. Attach this to the connector labeled "Accessory Control" on the rear of the MSD/MS.

**Note:** One end of the Tekmar cable ends in a 9-pin connector. When you are using a Pascal-based Chemstation, the 9-pin connector does not have to be attached; leave it disconnected.

### ***Special Programming and Software Considerations***

1. *If you are using a Pascal-based Chemstation...*
  - Under "Acquisition", select "Edit ALS". Specify "Hand Held Syringe".
  - You must have the sequencing option on the software if you have an autosampler installed.
2. *If you are using a Unix-based Chemstation...*
  - Under "Instrument", specify "Manual" for "Injector Control".



7143 East Kemper Road, Cincinnati, Ohio 45242-9576  
(800) 543-4461 • Outside the U.S. (513) 247-7000 • Service (800) 874-2004  
Telefax (513) 247-7050

5/03