

# Installation Instructions

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## Interface Part Number 14-2970-000


Interfacing a Tekmar™ 2000/7000/3000/6000/Velocity XPT to a Perkin-Elmer Sigma Series GC

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This interface allows the Tekmar unit to operate automatically with your Perkin-Elmer Sigma Series GC (gas chromatograph). 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.

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, 6000 or Velocity XPT. You set up the interface through software. See the following instructions for your particular unit.

	<b>WARNING</b>	
<b>Electrical shock hazard inside. Unplug power cord before removing panels.</b>		

	<b>CAUTION</b>	
<b>Circuit board components can be damaged by static discharge. Avoid touching the components unless otherwise noted.</b>		

### *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.
  - 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.)

## Tekmar™ 2000/7000/3000/6000/Velocity XPT to a Perkin-Elmer Sigma Series GC (continued)

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

- 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. See the illustration included with these instructions.
2. Locate the remote interface terminal strip on the rear of the GC. On the Sigma models (numbers 1, 2, 3, 4 and 300), the terminal strip is on the right side if you are looking at the rear of the unit. On the 2000 and 2100, the terminal strip is on the left side if you are looking at the rear of the unit.
3. Connect the red and black wires to the terminals marked EXTERNAL (EXT.) START or EXTERNAL (EXT.) RUN.
4. Connect the white and green wires to the terminals marked READY (RDY.) OUT.

### **Connection to a Peripheral Device (Data System)**

This interface has a two-wire cable that is used to start a peripheral device. Refer to your peripheral device manual for the location of the terminals to which these wires attach.

1. Connect the black wire to the ground, common or negative terminal.
2. Connect the remaining wire to the other terminal.
3. If you are not using this cable, insulate the bare wires with electrical tape or cut them off to keep them from touching each other.

