




Installation Instructions

Interface Part Number 14-2973-000

Interfacing a Tekmar™ 2000/7000/3000/6000/Velocity XPT to a Schimadzu GC 9A

This interface allows the Tekmar unit to operate automatically with the Schimadzu GC 9A. It allows the GC (gas chromatograph) 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.

	WARNING	
Electrical shock hazard inside. Unplug power cord before removing panels.		

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

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, Velocity XPT; 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.
 - 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.

Connection to the 7000 (continued)

- 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 and GC Type Number (3000,6000,Velocity XPT only)

1. Turn on the Tekmar unit.
2. At the System Error/System Reset Screen, press ENTER.
3. Allow the system to run through the automatic self-test.
4. At the Standby Screen, press the CONF key. The Configuration Screen will appear on the display.

Note: For assistance in understanding the following steps, refer to the manual shipped with the 3000/6000. You do NOT have to refer to the 3000/6000 manual to finish installing the interface.

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 can choose one of the following: *Standard* or *User*. Choose **User**. Press any numeric key to cause the display to toggle from one choice to another. Press ENTER to save your selection.
7. Since you have chosen User, you must specify a *User GC Type Number*. At the GC Port Screen, press the NEXT PAGE key. The *Special GC Type* Screen will appear on the display. Specify **31** for the User GC Type Number by pressing the appropriate numeric keys. Press ENTER to save the entry.
8. Turn off the Tekmar unit.

Connection to the GC

1. Locate the internal terminal strip on the rear of the GC.
2. One "arm" of the Tekmar interface has four spade lugs at its end. Referring to the table below, attach each spade lug to the appropriate screw terminal on the internal terminal strip.

Color of Wire	Screw Terminal Number
green	23
white	24
black	36
red	37

Connection to the GC

Tekmar™ 2000/7000/3000/6000/ Velocity XPT to a Shimadzu GC 9A (continued)

Optional Connection to a Peripheral Device or Data System

This interface has a two-wire cable that is used to start a peripheral device. Refer to your peripheral device manual to locate the terminals to which these two 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.



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