

Installation Instructions



Interface Part Number 14-4652-086


Interfacing a Tekmar™ 2000/7000/3000/6000/Velocity XPT to a Hewlett-Packard 5890 GC with a 5971 MSD (MS/DOS) or a Hewlett-Packard Engine GC

This interface allows the Tekmar unit to operate automatically with your Hewlett-Packard instruments. 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.

Refer to Figure 1 on the following page for installation assistance.

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 if you are using a 3000 or 6000; you set up the interface through software. See the following instructions for your particular unit.

	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.	

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).

Tekmar™ 2000/7000/3000/6000/Velocity XPT to an HP 5890 GC with a 5971 MSD (MS/DOS) or an HP Engine GC (continued)

Connection to the 7000 (continued)

- 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 XPTonly)

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-tests.
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 **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 *GC Type Number*. 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.

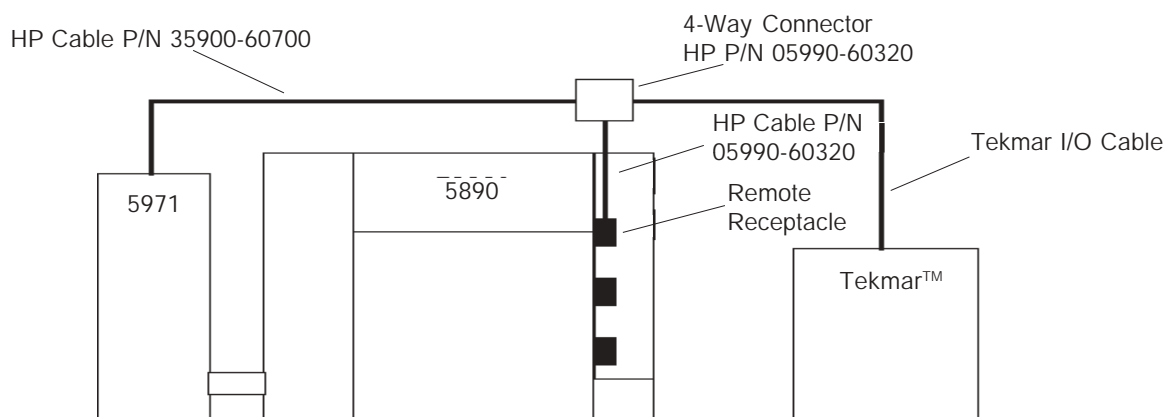


Figure 1 (Overhead View)

Tekmar™ 2000/7000/3000/6000/Velocity XPT to an HP 5890 GC with a 5971 MSD (MS/DOS) or an HP Engine GC (continued)

Connection to the GC

1. Remove the right top instrument cover on the GC.
2. Plug the 12-pin connector into the receptacle labeled REMOTE.

Note: The four-way connector board and attached connection cables are standard with the 5971 MSD. However, they may need to be installed.

3. Coil the cable partially around the strain relief posts.
4. Route the cable out the rear of the GC.
5. Replace the cover.

GC/MS Considerations

If you are using this cable with a 5971 MSD (MS/DOS), do the following:

1. Press ACQUIRE DATA while in the top level.
2. Select EDIT PARAMETERS.
3. Under INJECTOR CONTROL, select MANUAL.

Optional Connection to a Peripheral Device (Data System)

This interface has a two-wire cable that is used to externally 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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