Installation Instructions

Interface Cable Part Number: 14-4938-086
Interfacing a Tekmar® 2000/7000/3000/6000/Velocity XPT to a Carlo Erba Mega/Vega or 8000 GC

Introduction
The interface cable allows the Tekmar unit to operate automatically with the gas chromatograph (GC). It allows the GC to send a Ready signal to the Tekmar unit and enables the unit to start the GC upon sample injection.

For the interface to work properly, you need to set switches on the 2000/7000 input/output (I/O) board. You do **not** need to set switches for the 3000, 6000, or Velocity XPT; use the software to set up the interface. Refer to the instructions that pertain to your particular unit.

Safety

⚠ **WARNING** ✋
To avoid electrical shock, unplug and turn off the Tekmar unit.

⚠ **CAUTION**
Discharge of static electricity can damage parts on circuit boards. Avoid touching the parts unless otherwise noted.

Connecting the Interface Cable to the 2000
1. To access and set the switches:
    a. Locate the I/O board. Extending out of its bracket are two connectors, which can be accessed at the rear of the unit. (See the photograph in Section 12 of your 2000 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. Fully seat the board into its connector.
2. Plug the interface cable into the matching connector on the I/O board.

Connecting the Interface Cable to the 7000
1. To access and set the switches:
    a. Loosen (do not remove) the two screws 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. Next, pull the panel toward the front of the unit to release it from the locating pins, which are on the rear of the unit.
    c. Locate the three sets of 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. Install 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 screws.
2. Extending out of the I/O board's bracket are two connectors, which you can access at the rear of the unit. Plug the interface cable into the matching connector on the I/O board.

Connecting the Interface Cable to the 3000, 6000, or 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. You can access these connectors at the rear of the Tekmar unit.
3. Plug the interface cable into the matching connector on the interface board.

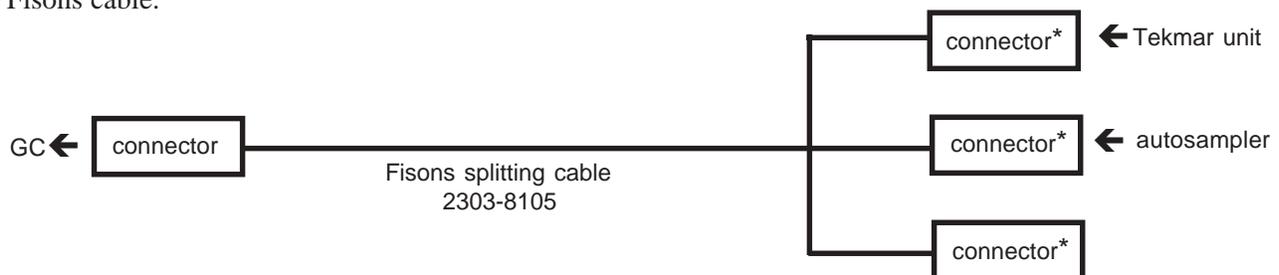## Specifying the GC Port (3000,6000, Velocity XPT only)

1. Turn on the Tekmar unit.
2. At the System Error/System Reset Screen, press ENTER.
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. You have two choices for the GC Port: *Standard* or *User*. Choose Standard. You can toggle the display from one choice to another by pressing any numeric key. Press ENTER to save your selection.
7. Turn off the Tekmar unit.

Connecting the Interface Cable to the GC

If you are plugging the interface cable into an older Carlo Erba GC, you will find three 37-pin parallel ports (connectors) on the GC's rear panel. Plug the interface cable into any one of the connectors.

If you are connecting the interface cable to a newer Carlo Erba GC...
You will find only one 37-pin connector on the back of the GC. If an autosampler is not plugged into the connector, plug in the interface cable. If an autosampler is plugged into the connector, order a splitting cable (part number: 2303-8105) from Fisons. The Fisons cable has one connector at one end and three connectors at the other end. Referring to Figure 1 below, plug the Fisons cable into the GC. Plug the Tekmar unit and autosampler into the Fisons cable.

* Plug the autosampler and Tekmar unit into any of the three connectors–it does not mattter which connectors you choose.

Figure 1 Connecting the Tekmar Unit and the Autosampler to the Newer GC Via the Fisons Cable

Connecting the Interface Cable to an Optional Peripheral Device (Data System)

The interface cable has two extra wires that are used to externally start a peripheral device. Refer to your peripheral device manual for the location of 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 these wires, insulate the bare wires with electrical tape or cut them off to keep them from touching each other.