Archon Connections
to Varian 3400 and 3600 GC's with Star Workstation
Remote I/O Cable Hookup Instructions
Archon to Tekmar LSC 2000/3000 to Varian 3400 and 3600 GC's

When connecting to a Varian series 3400 or 3600 GC with Star Workstation, connectors from both the Archon I/O cable and the Star Workstation cable must access the J16 and J23 connectors on the GC motherboard. This is possible using the J16 Splitter (p/n DY-700030-00) and the J23 Splitter (p/n DY-700031-00) following the instructions below:

1. Turn off the power and unplug the power cord from the GC. Remove the top panels to allow access to the GC motherboard.
2. Route the GC-end of the Archon I/O cable and the GC-end of the Star Workstation cable through the back panel of the GC (see Star Workstation installation diagram).
3. Connect the 5-pin female Molex connector (P23) from the Star Workstation cable to the male connector on the J23 Splitter with 4 pins (the second position lacks a pin).
4. Connect the 5-pin female Molex connector from the Archon I/O cable to the 5-pin male connector on the J23 Splitter.
5. Connect the J23 Splitter to the J23 connector on the GC motherboard (see GC manual for motherboard layout schematic).
6. Connect the 4-pin female Molex connector from the Archon I/O cable to either of the 4-pin male connectors on the J16 Splitter.
7. Connect the 4-pin female Molex connector (P16) from the Star Workstation cable to either of the 4-pin male connectors on the J16 Splitter.
8. Connect the J16 Splitter to the J16 connector on the GC motherboard (see GC manual for motherboard layout schematic).

9. Complete the installation of the Archon I/O cable and of the Star Workstation cable according to the standard instructions for those cables.

**NOTE**

The following sequence occurs when the Archon and a Purge and Trap unit is configured with the Varian 3400 and 3600 GC with Star Workstation:

1. The Archon begins its sample handling after receiving a **Ready** signal from the Purge and Trap unit. As configured above, the Purge and Trap goes to **Ready** without waiting for the GC. This allows the user to prepare the GC or Workstation while the sample is being purged and collected in the Purge and Trap.

2. The Purge and Trap collects the purged sample onto its trap and waits for a **Ready** signal from the GC. This occurs after the Workstation issues a **Ready** signal to the GC through the Workstation's cable plug attached to the GC's J16 **Ready-In** pins, 1 and 2. In turn, the GC sends a **Ready-Out** signal from its J23 pins 1 and 3 into the Archon I/O cable.

3. When the Purge and Trap has both completed its purge cycle and detected a **Ready** signal from the GC, the Purge and Trap desorbs the sample from its trap and issues a **Desorb-Out** signal to both the Archon and to the Varian GC. This signal travels through the Remote I/O cable supplied with the Archon.

4. The Desorb-Out signal from the Purge and Trap starts the Archon's **AutoDrain** cycle which drains the sparge vessel if a water-sample method is being run on the Archon.

5. The **Desorb-Out** signal simultaneously travels through the Archon Remote I/O cable to its connector attached to the GC's J16 Start-In pins, 3 and 4, and initiates the GC run. The GC in turn initiates a **Start-Out** signal through J23 pins, 4 and 5, which triggers the Workstation to begin data collection.
Warranty

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