



## **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**

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Remote I/O Cable Hookup Instructions:

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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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