

Agilent Technologies' EZChrom Elite CDS and Agilent OL Operating System for the Laboratory are software systems well known for their comprehensive instrument control. In addition to software control of many commercial Gas Chromatographs, autosamplers and HPLC instruments, EZChrom *Elite* and Agilent OL can also control two position and Multiposition Microelectric Actuated valves from VICI AG (Valco Instruments Co, Inc) with optional instrument control software. This capability allows VICI valves to be integrated into an HPLC or GC instrument system for additional sampling control.

The VICI Valve instrument control software option allows the software method to specify which stream position to use before the chromatographic run is started. Used in this way, the VICI Valve functions as a sampling device. By setting a delay between selecting a stream and staring a run, it is possible to optimize the cleaning of the sample loop of the injection valve.

In addition to its use as a sampling device, the VICI valve may be used in a standard stream switching role. By entering commands into an EZChrom or Agilent OL method timed event table, multiple valves can be switched during the chromatographic analysis.

- EZChrom *Elite* and Agilent OL control the VICI family of valves.
- · Flexibly handle over 300 different GC and HPLC modules from more than 25 different manufacturers in conjunction with VICI valves.
- · Support a variety of different flow configurations through software.
- Controlled via RS-232.



Practical Usage

This VICI Valve control software option can be used in situations where multiple streams need to be analyzed according a certain sequence program. The valve switching program can fully be programmed in an (endless) EZChrom *Elite* or Agilent OL Sequence. The injection valve can be switched and the selected stream will be analyzed.



In combination with instrument control, different GC methods can be linked to a certain stream, maximizing the sample throughput and optimizing the separation process for a certain stream.

EZChrom or Agilent OL systems can control VICI Valves with a large number of different LCs and GCs from different manufacturers. Over 300 different LC and GC systems can be controlled through EZChrom from manufacturers such as Agilent, Shimadzu, Hitachi, Thermo Electron, Varian, PerkinElmer, and many others. This allows laboratories many flexible choices in applying particular instrumentation with VICI Valves for highly specialized applications.

Other Possible Applications

- Multi stream selection with microGC's
- · Pilot plant monitoring with conventional GC's
- · Column switching with HPLC instruments

Visit www.agilent.com/chem/scisw or call toll free 1-800-227-9770 (U.S. and Canada).

In other countries, please call your local Agilent Technologies analytical sales office or Authorized Agilent Technologies Distributor.

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VICI Valve Control Software Provides:

- Program a stream selection sequence
- Optimize sample throughput in combination with instrument control
- Program valve-switching during an acquisition run

🔳 De	etector 1 🔯 Sa	mpling 🖞 S	witching 💫	Trigger	
/alve	Initial Conditions				
	Valve		Initial Position		
1	Valve1		4		
2	Valve2		1		
/alve	Time Program	1			
/alve	Time Program		Valve	Position	
/alve	Time Program Time (min.) 0.40	Valve1	Valve	Position 6	
/alve 1 2	Time Program Time (min.) 0.40 0.60	Valve1 Valve1	Valve	Position 6 8	
/alve 1 2 3	Time Program Time (min.) 0.40 0.60 0.80	Valve1 Valve1 Valve1	Valve	Position 6 8 4	
/alve 1 2 3 4	Time Program Time (min.) 0.40 0.60 0.80 2.00	Valve1 Valve1 Valve1 Valve1 Valve2	Valve	Position 6 8 4 2	
/alve 1 2 3 4 5	Time Program 0.40 0.60 0.80 2.00 2.20	Valve1 Valve1 Valve1 Valve2 Valve2	Valve	Position 6 8 4 2 1	

Specifications:

VICI Valves Supported:

- EMHA 2-position valves
- EMHCA Multi-Position (software configurable 2 to 16 positions)
- EMTCO Multi-Position (software configurable 2 to 16 positions)

These valves are available in different flow configurations such as SD, SC, SF, ST and STF, enabling you to optimize your sample treatment.



Delay after switching: 0.0 to 10.0 minutes

<u>Communications</u>: VICI valves connect to the EZChrom workstation or Agilent Instrument Controller via RS-232 (1200 to 38400 Baud). One(1) RS232 Com port is required per VICI Valve. Connection can be through RS232 Communications Card or the RS232 version of the Agilent Instrument Controller.

<u>Restrictions</u>: Not configurable in combination with standard sampler. Only 1 Multi-position valve can be controlled for stream selection.

