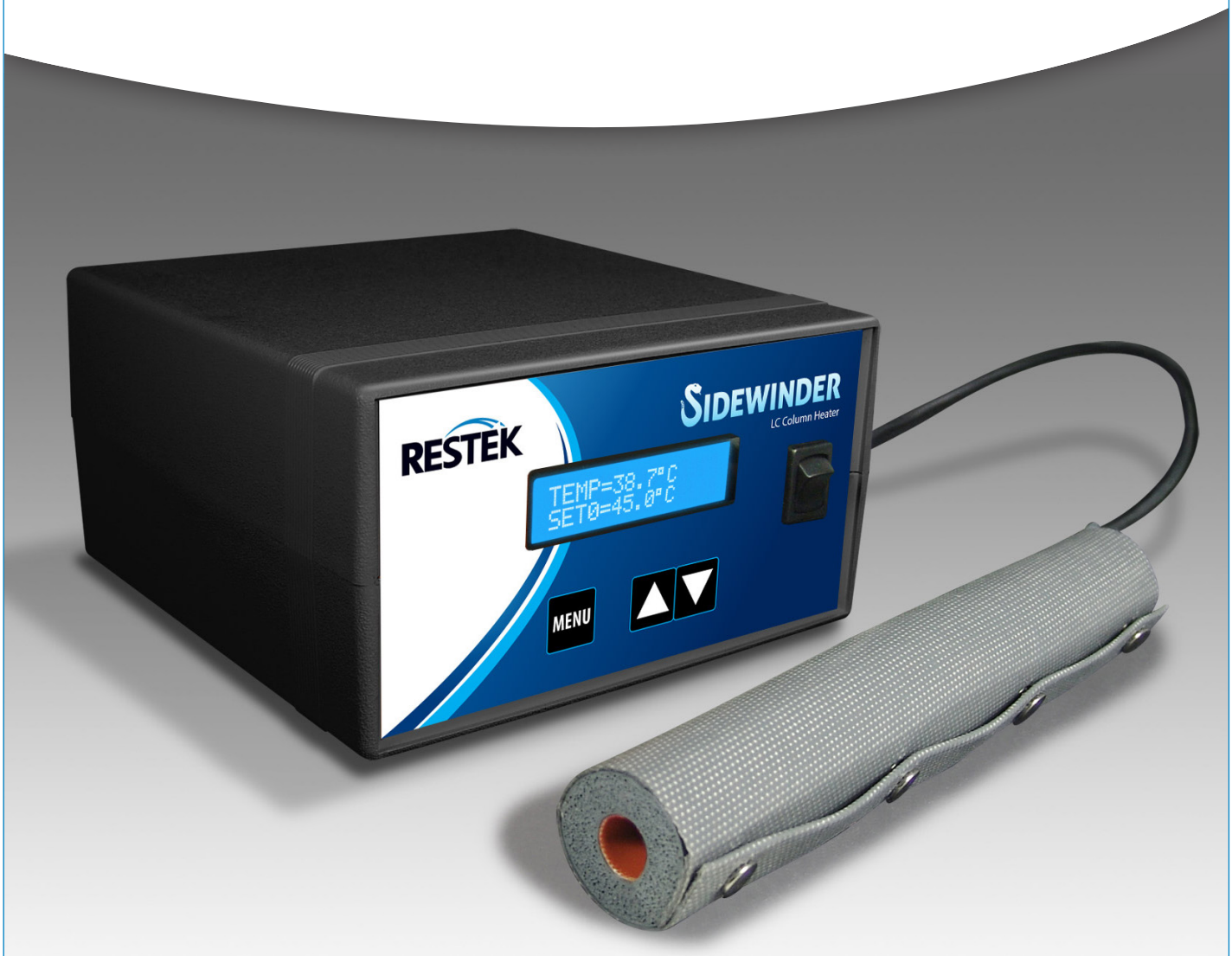
Instruction Manual

Restek Sidewinder LC Column Heater

(Cat.# 25732 & 25733)



RESTEK Pure Chromatography www.restek.com

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Restek Sidewinder LC Column Heater

Instruction Manual

Thank you for purchasing Restek's Sidewinder LC Column Heater system. This manual will guide you through setup, and operation or your new system.

Safety Warnings:

All heater systems are designed for use by properly trained individuals following Good Laboratory Practices (GMP) who have read and understand this entire manual.

⚠ **CAUTION:** Restek Sidewinder LC Column Heaters are finely tuned instruments. The flexible heating units used by this controller are sensitive and delicate devices that when used correctly will offer you years of reliable service. Sleeves must NOT be bent backward or excessively flexed in any direction. Doing so could possibly break the thin wires imbedded within the sleeve and cause the heater to stop heating properly.

⚠ **CAUTION:** The temperature controller must be operated away from liquids so as not to accidentally spill solvents on the top cover. Do not immerse or operate any part of the Column Heater in liquids. In the event of solvent leakage, wipe sleeve or device clean before further use.

Product Specifications

Power Requirements: 90-264 VAC, Internal Conversion to 24 VDC

Heating Range: 5° C above ambient to 100° C

Heating Elements: 12-100 Watt, 24 VDC Rated

Heater Accuracy: +/- 0.5° C

Controller Accuracy: +/- 0.1° C

Calibration Points: 45° C Set within Heater Jacket

Environmental

Operating temperature: 32° to 122° F ambient (0° to 50° C)

Operating humidity: No greater than 75% relative humidity (non-condensing)

General Inspection

Unpacking and Inspection

Verify that the column heater package contains the following:

Sidewinder controller, 24 VDC power supply, power cord, manual, GUI software, green remote plug, USB 2.0 cable, and test data sheets if in kit form.

Please notify Restek Technical Service at support@restek.com if the column heater has any missing or damaged parts.

The Sidewinder controller is used for applications that require single heating zones. Used in conjunction with the heater jacket, it maintains one channel.

The Sidewinder controller is designed for use in analytical format liquid chromatography applications only.

The actual temperature and the user-selected set point are displayed on the front of the temperature controller. Both the user set point and the actual temperature are in full display by pressing the Menu button.

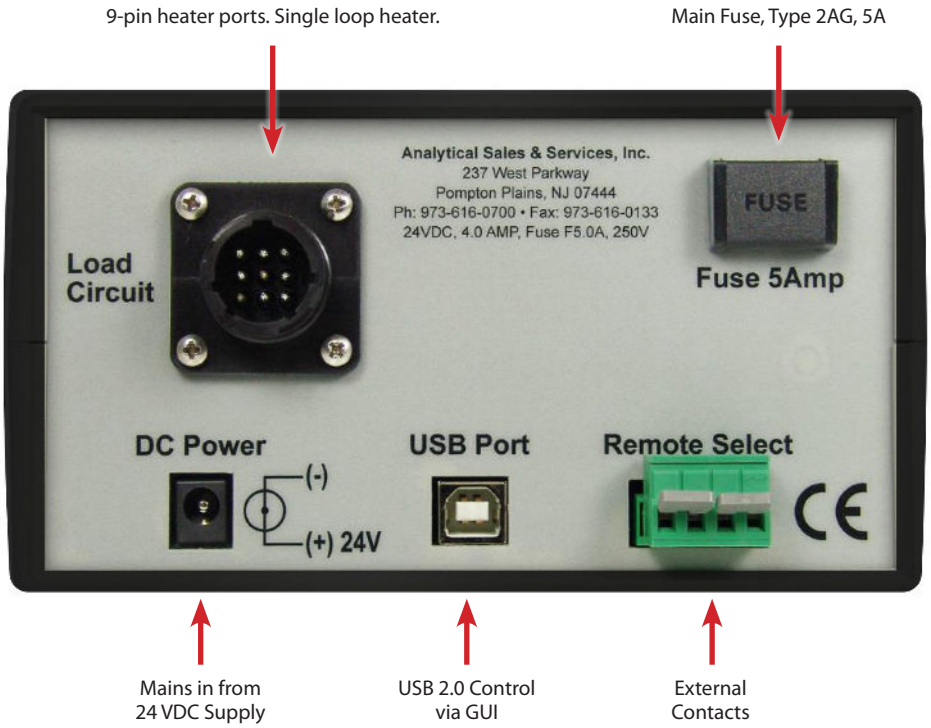
The Sidewinder LC Column Heater will function with a heater jacket. Each smart heater has a unique blue banding on the cord indicating built-in Smart Chip sensing.

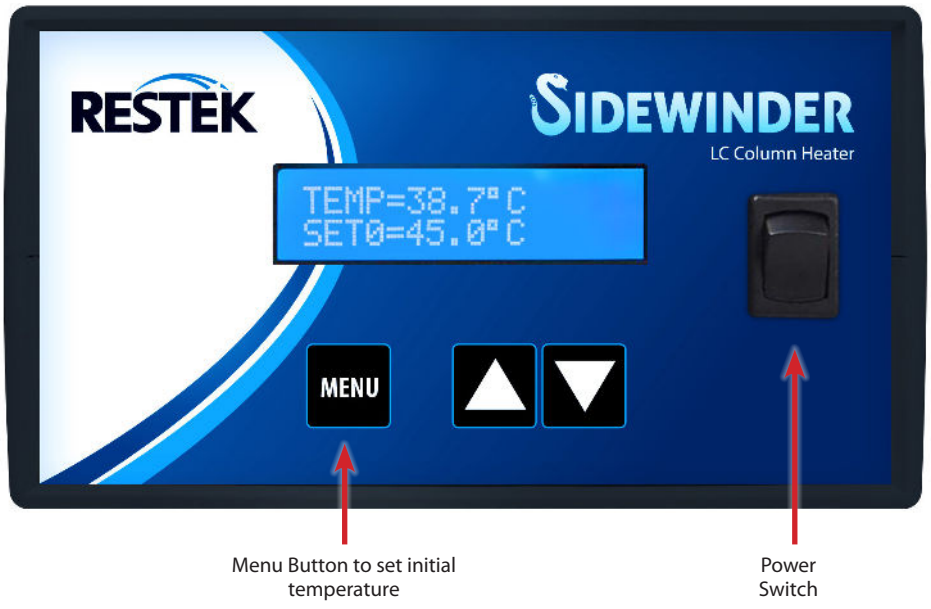
NOTE:

The Restek Sidewinder LC Column Heater will only accept heater jackets with new "plug & play" technology. **Heaters are not "hot swappable" while unit is powered on.**

Setup

Make certain that the temperature controller is turned off. Insert the power cord into the main receptacle, and then the plug into the supplied 24 VDC desktop power supply. Lastly, insert the heating plug into the back of the controller marked load circuit shown below.





Turn the column heater on. The temperature controller will perform a self-diagnostic test upon power up. If, after powering up, the display indicates something other than reasonable temperature values, notify technicalservice@restek.com for further action.

The column heater contains one fuse. If the display does not appear to illuminate at all, check the main fuse.

Note that the LCD display on the front panel will show two numbered values displayed in **°C** for the channel. The Top number, **T=**, is the actual column enclosure temperature. The bottom number, **S=**, is the column temperature set point.

Operation

Depress the MENU button on the front panel to enter the temperature setting mode. Use the set point adjustment arrow buttons to raise and lower the desired set point per heating channel. Pressing the up or down arrow button alone will not change the set point value.

Depressing the MENU button will cycle through set point zero, remote 1, and remote 2.

Set the temperature to 35° C; after a few moments the column enclosure temperature will begin to rise as indicated by the T= display. Allow the column heater to reach 35° C and verify that the column heater will control properly. The set temperature will equilibrate quickly. Upon successful evaluation, set the heater to the desired control temperature.

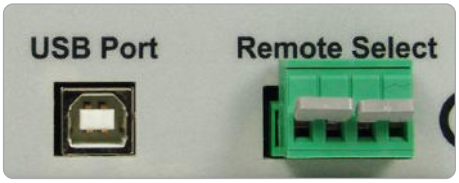
Use and Care

The column heater is engineered to be lightweight and efficient. The materials used in fabricating the heater and controller sections may be sensitive to solvents. Proper installation includes reliable leak testing before installing the heater for each use. Do not immerse or operate any part of the column heater in liquids. **In the event of solvent leakage, wipe sleeve down with clean paper towel before further use.**

The Temperature Control Module is custom designed to offer optimum performance in heating applications. It has fast 100 Hz sampling that improves control responsiveness; variable time-based burst firing that increases the heater life and gives better temperature controllability; and a compact size that allows it to be placed in small areas.

External Control

Your controller is equipped with an external control feature. The first is through USB 2.0 control with the supplied Graphical User Interface (GUI) software provided on the CD. The second is through contact closures from an outside source, i.e., autosampler, pump, etc. Attach leads to the supplied green plug. Once contact is established at the other end of the leads, the controller will automatically disengage or engage heating values.



Remote Graphical User Interface (GUI)

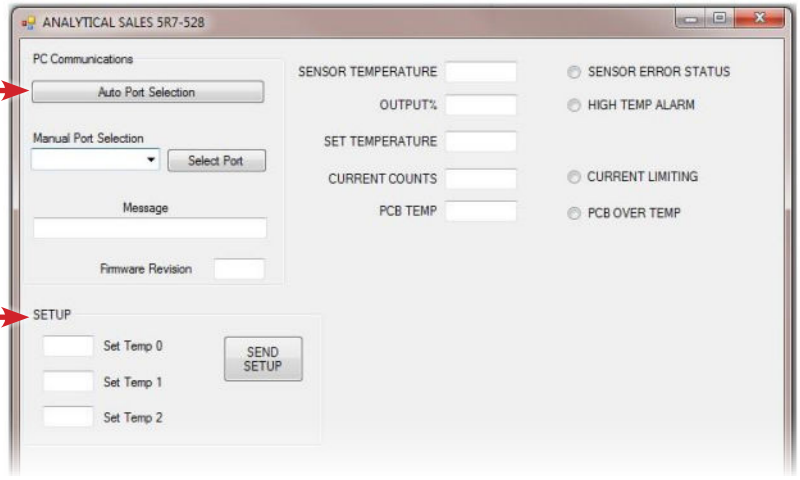
Along with your Sidewinder LC Column Heater, you also received a CD containing a graphical user interface that will allow you to control each channel from a computer should you wish to.

Place the GUI CD into your computer. You may transfer the program to your workstation or start the program directly from the CD. Plug in the USB cable and start up the program and the interface at the right will appear.

Select AUTO to initialize the port. All current programmed information will appear within the display

Select Auto Port or enter port manually if known. COMM Port (COM1 is default) and When communication is established, COMM OK will be shown.

This area indicates values from the front of the controller only.



EU Declaration of Conformity (DoC)

We

Company name:	Analytical Sales and Services, Inc.
Postal address:	179 US Route 206
Postcode:	07836
City:	Flanders, New Jersey USA
Telephone number:	973-616-0700
E-Mail address:	info@analytical-sales.com

declare that the DoC is issued under our sole responsibility and belongs to the following product:

Apparatus model/Product:	HotSLEEVE Series Heaters; 5cm, 10cm, 15cm, 25cm, and 30cm
Type:	24VDC
Batch:	
Serial number:	Individual

Object of the declaration (identification of apparatus allowing traceability; it may include a colour image of sufficient clarity where necessary for the identification of the apparatus):

HotSLEEVE™ Plus Column Heater

The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:

EMC Directive 2014/30/EU
Low Voltage Directive (LVD) 2014/35/EU
EN 61326-1-2013
EN 61010-1:2010
EN 61010-2:2010
RoHS III/REACH/WEEE

The following harmonised standards and technical specifications have been applied:

Title, Date of standard/specification:	
Directive 2014/35/EU	...
...	...
...	...
...	...
...	...
...	...

Notified body (where applicable): **4 digit notified body number:**

Additional information:

Signed for and on behalf of:

Flanders, NJ USA	2020-02-17	David A. Isom, Technical Director
Place of issue	Date of issue	Name, function, signature

Analytical
SALES & SERVICES, Inc.

Certificate of Declaration

RoHS III/REACH/WEEE

RoHS WEE REACH PROP 65 Conflict Minerals
COMPLIANT

This document dated June 30th, 2022, is the complete declaration on behalf of Analytical Sales and Services, Inc., that its manufactured products comply with the following current European and Chinese Directives.

RoHS3 (Restrictions of Hazardous Substances in Electronic/Electrical Equipment), a European Directive (2002/95/EC) & (2011/65/EU) (2015/863), that bans the use of various materials produced in electronic/electrical equipment. Restricted materials have been eliminated/reduced to levels considered acceptable, based upon the Directive. Amendment 2015/863

REACH Regulation (EC) Article 59 (10) of Regulation (EC) No. 1907/2006 imposes requirements for the Registration, Evaluation and Authorization of Chemical substances and products sold in the EU countries. All products provided are REACH 197 SVHC's Compliant. Amended No. 1272/2008

WEEE 2 (Directive 2012/19/EU) EU rules on WEEE aim to contribute to sustainable production and consumption. They address environmental and other issues caused by the growing number of discarded electronics in the EU.

This Statement is based on our understanding of the RoHS Directive, REACH Directive, and WEEE Directive, and our knowledge of the materials that are used in the Analytical Sales and Services, Inc. products as of the date of this Statement.

Dodd-Frank This document dated September 4, 2012, is a complete declaration on behalf of Analytical Sales and Services, Inc., that products manufactured comply with the Dodd-Frank Wall Street Reform and Protection Act (section 1502) requiring disclosure of the presence of minerals mined in the Democratic Republic of the Congo and/or adjoining countries.

REACH Substances: Candidates, Authorization, and Restrictions

The most recent version of the Candidate list can be found on: https://echa.europa.eu/candidate-list-table

The most recent version of the Authorization list can be found on: https://echa.europa.eu/authorisation-list

The most recent version of the Restriction list can be found on: https://echa.europa.eu/substancesrestricted-under-reach

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