

TCC-100

Thermostatted Column Compartment



Quick Installation Guide

This Quick Installation Guide provides information about how to install the TCC-100 Thermostatted Column Compartment and its options. For additional information, please refer to the *Operating Instructions* for the instrument.

1. General Information

1.1 Preparation

Bring the unit to a moderate temperature for four hours to allow any condensation that might have occurred during transit to evaporate. Do not connect the unit to the mains during this period. If it is obvious that condensation did not evaporate completely, continue to warm-up the unit (which is not connected to the mains) until the condensation is completely gone.

Place the instrument on a firm and level surface that is free of vibration. Make sure that the surface is resistant to solvents. Avoid locations with extreme changes in temperature (such as direct sunlight or drafts) and high air humidity.

1.2 Electrical Connection



Connect the TCC-100 to the mains, using the power cord shipped with the instrument.



Turn on the TCC-100 by pressing the power switch on the rear panel.



The temperature display starts flashing.

In **stand-alone control**, press the **Minus** or **Plus** key on the front panel to activate temperature control. The preset temperature set point is displayed for information. The temperature display stops flashing and indicates the actual temperature. The column chamber is heated or cooled to preset temperature set point.

To increase or decrease the value, press the **Plus** or **Minus** key until the display starts flashing. You can change the set point in increments of 0.1°C as long as the display is flashing. To change the temperature value more quickly, hold down the key. The display stops flashing when you release the key, and then displays the actual temperature again.



To interrupt operation without turning off the instrument, press the **Standby** key. This sets the instrument to standby mode. To resume operation, press the **Standby** key again.

2. Automated Control by Chromeleon®

- i Please note:** Install Chromeleon software before connecting the TCC-100 to the USB port on the Chromeleon server PC.



For USB connection, connect the USB cable from the TCC-100 accessories kit to the USB port on the instrument's rear panel and to the USB port on the Chromeleon server PC.

- i Please note:** The USB connection between the TCC-100 and the PC or a USB hub must not exceed 5 m. A special USB extension cable (Dionex part no. 8911.0004) is available if longer connections are required. Up to five extension cables may be connected in series. For system reasons, the overall connection length must not exceed 30 m.


For Chromeleon versions 6.30 and 6.40, install the TCC-100 column compartment driver via the Setup program on the software CD provided in the accessories kit. Insert the CD into the CD drive of your Chromeleon server PC. Double-click **Setup.exe** in the root directory. Click **Next** to have the Setup program check which Chromeleon version is installed on your PC. Follow the on-screen instructions as they appear to install the driver. If a version is found for which no driver is available, the setup aborts.

For Chromeleon versions higher than 6.40, the USB installation of the TCC-100 is handled automatically during the Chromeleon setup. The user will not be required to take any other action.

- i Please note:** Windows NT 4.0 does not support USB. In this case, use a LAN connection instead.



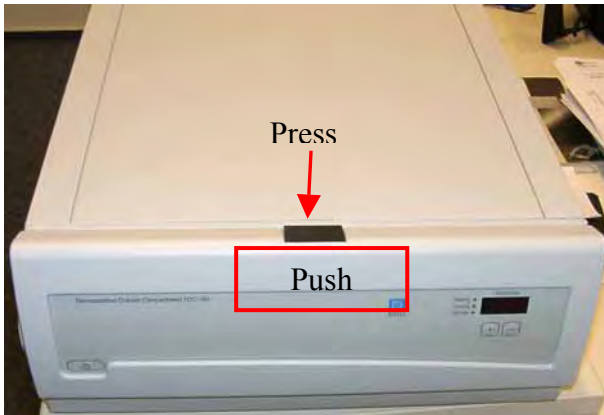
For LAN connection, connect the LAN cable from the TCC-100 accessories kit to the LAN port on the instrument's rear panel and to the LAN port on the Chromeleon server PC or to a LAN hub, which is connected to the Chromeleon server PC.

 **Please note:** Only use the LAN connection for communication between the TCC-100 and the Chromeleon server PC under Windows NT 4.0. Even though LAN communication is also possible with the other supported Windows operating systems, we recommend using a USB connection whenever possible.

For information about the TCP/IP setup, please refer to the *Operating Instructions* for the TCC-100.

Afterward, install the TCC-100 in the Chromeleon Server Configuration program. Follow the instructions in the corresponding sections of the *Operating Instructions* for the instrument or refer to the *Chromeleon online Help*.

3. Installing a Column



To open the TCC-100 push the front panel against the enclosure and press the release button on top of the housing.



The TCC-100 front panel tilts downward and the fan stops automatically if temperature control is enabled.



Tighten the column clips into place using a screw driver.



Press the column into the column clips.



To close the front panel tilt it upwards...



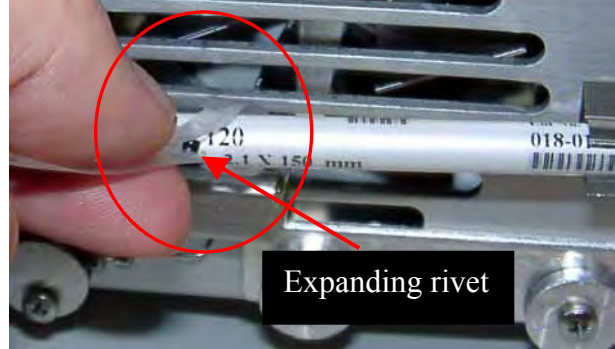
...until you hear the locking mechanism engage. The fan restarts automatically.

i **Please note:** For precise temperature control, make sure that the front panel is closed properly.

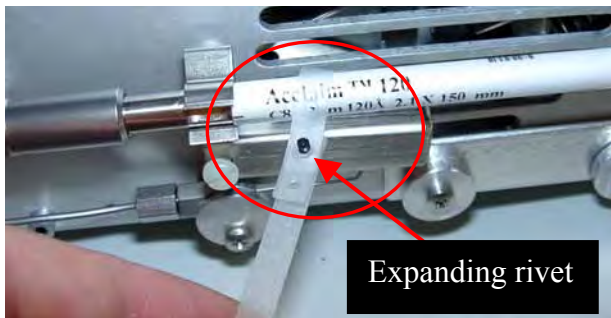
4. Using the Column Identification System



The TCC-100 is fitted with a column identification system (part no. 5710.1505) that allows you to store column-specific information on a chip card and read it out whenever you want.



Clip the memory chip card ...



... onto the column as shown above. (To do so, you can open the expanding rivet by removing the rivet head from the body.)



Take the chip card. Make sure that the Dionex logo is facing you.



Insert the chip card (with the Dionex logo facing up) into one of the column identification slots.



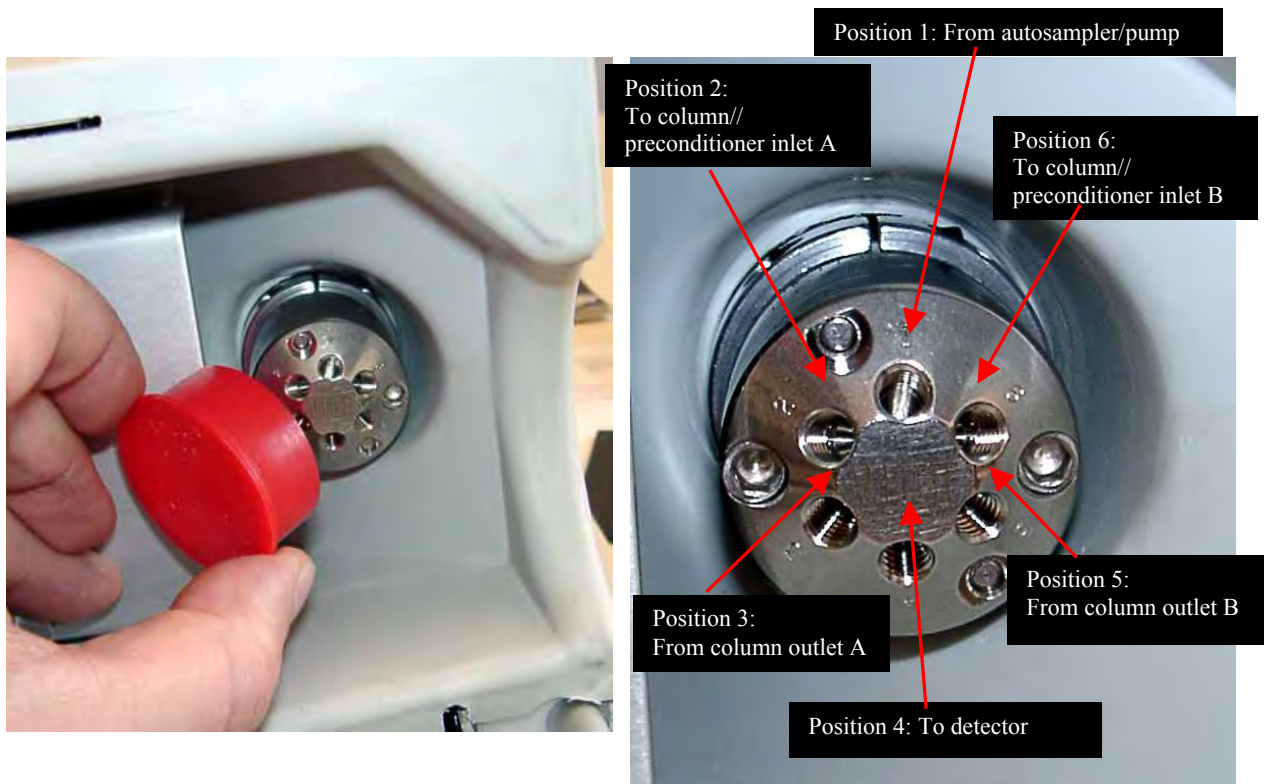
You may now close the front panel door.

i Please note: Column identification is supported for two columns simultaneously.

i Please note: To store and read out the column-specific information, use the corresponding commands and properties in Chromeleon. For more information, refer to the *Chromeleon online Help*. Column identification is not supported in stand-alone control.

5. Configuring the Column Switching Valve

i Please note: In the example below, two eluent preconditioners are used. For information about how to install the eluent preconditioner, refer to the Installation Instructions shipped with the units.

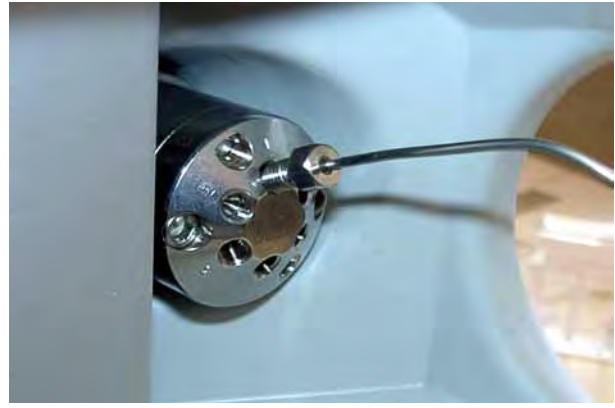


Remove the plastic cap that protects the column switching valve during shipment.

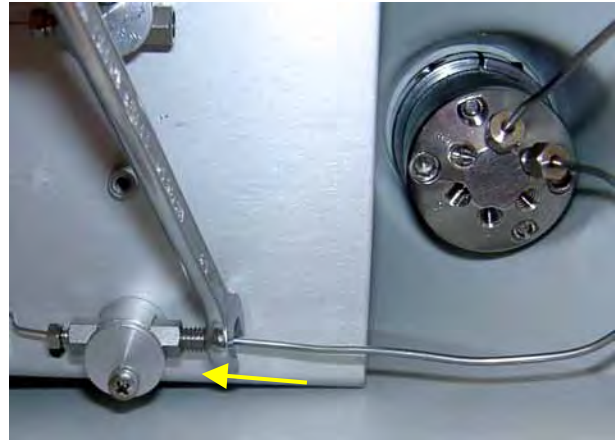
For a typical example for the connections on the valve, see the photo above.



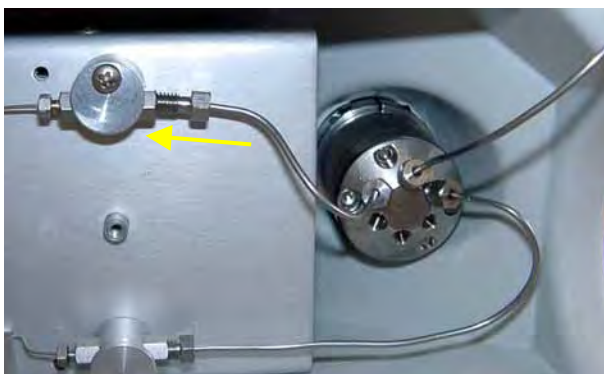
Tighten the fitting screws, using an appropriate tool.



Connect the capillary from the autosampler (or pump) to valve position 1.



Connect the capillary from valve position 6 to the inlet of either a column or eluent preconditioner (here: to the eluent preconditioner installed in the bottom position in the column chamber.)

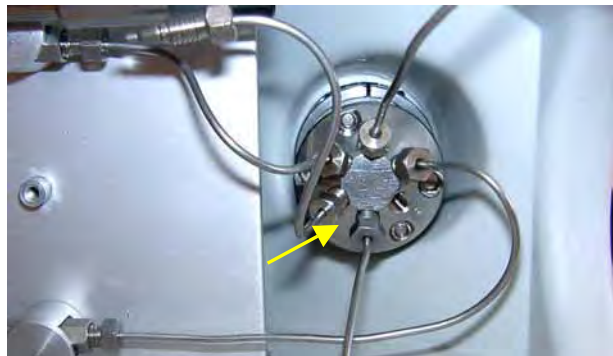


Connect the capillary from valve position 2 to the inlet of either the second column or second preconditioner (here: to the eluent preconditioner installed in the top position).

Connect the capillary to the detector inlet to valve position 4.



Connect the column inlet to the outlet of the relevant preconditioner (here: to the preconditioner installed in the top position in the column chamber).



Press the column into the column clips. (In this example, the column is installed directly on the eluent preconditioner.)

Install a capillary between valve position 3 and ...

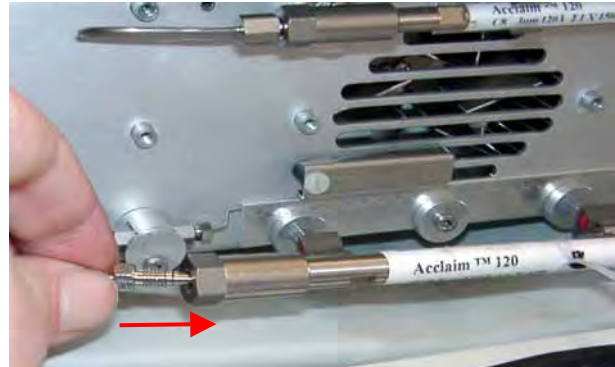
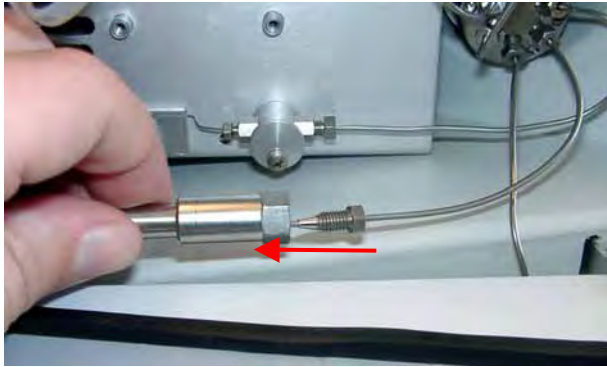


... the outlet of the corresponding column (here: to the column installed in the top position.)

Connect a capillary to valve position 5 and ...

i Please note:

If valve position 2 was used for the column inlet, valve position 3 must be used for the column outlet.



... the outlet of the corresponding column (here: to the column installed in the bottom position).

Connect the preconditioner outlet to the inlet of the relevant column (here: to the inlet of the column installed in the bottom position.)

i **Please note:**

If valve position 6 was used for the column inlet, valve position 5 must be used for the column outlet.



Configuration of the column switching valve and the installation of both columns is now complete.

i **Please note:**

In the above picture, the Column Identification System is used for both columns.