

Linkam Temperature Controllers

Linkam temperature controllers are designed specifically for use with Linkam hotstages and Linkam Peltier stages. When used with the Linksys 32 software these controllers can be fully automated with image data acquisition.

Features

- Completely contained power source
- Non-volatile memory for storing previous profiles
- Digital linearization of sensor signal for accuracy
- Simple to use
- Variable d.c. supply to heat stage
- Quick response hold key
- 8 function remote control
- Fitted with an RS 232 computer interface
- Output for the Linkam VTO 232 overlay unit
- Single function control keys
- Automatic control of LNP 94/2 cooling system
- Immediate change of limit & rate values
- Operational errors displayed as text
- Single cable connection to other Linkam units

Temperature Controller Range

TMS94 - 32 ramp temperature programmer

TMS94V - 32 ramp temperature programmer with vacuum display option

TMS94/1500 - 32 ramp temperature programmer with PSU for TS1500 high temperature stage

TMS94v/1500 - 32 ramp temperature programmer with vacuum display and PSU for TS1500 high temperature stage

CI94 - computer interface programmer with Linksys 32 software

TP94 - Single ramp temperature controller



CI94



TMS94



TP94

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TMS94

- Controlled heating rates of 0.01°C to 130°C/min*
- Controlled cooling rates of 0.01°C to 100°C/min*
- Up to 32 ramps in one programmable profile
- Displays Temperature to 0.01°C
- Profile repeat key - Cycle the Profile
- 40 character back lit liquid crystal display panel
- Hold time 0 - 9999 mins
- RS232 interface to allow programming by Linksys 32 software
- Software upgrades available by email.
- Optional Vacuum display when used with Pirani gauge

Up to 32 different ramps can be entered into a temperature profile. A ramp consists of a heating or cooling RATE, a LIMIT temperature and a HOLD time in minutes. A profile can be interrupted at any time by pressing the HOLD button, the ramp can then be modified using the RATE button and then HEAT or COOL buttons.

The software inside the TMS94 can be upgraded to work with the latest version of Linksys software simply by connecting the TMS94 to the PC via the RS232 cable supplied and downloading an update program attached to an email.



TMS94 Temperature Programmer

The TMS94 can be fitted with a vacuum readout PCB which will enable it to display vacuum from an Edwards vacuum gauge in Torr or mBar. (TMS94v to be used with FDCS196 or as TMS94v/1500 with TS1500V stages)

Both instrument and sample calibrations can be carried out through the front panel display. The TMS94 automatically recognizes the stage that it connects to and adjusts the heating rates and temperature limits accordingly enabling it to control a range of stages.

The TMS94/1500, a modified version of the TMS94, is used to control the TS1500 high temperature stage.

* Dependant on stage used.

TP94

- Controlled heating and cooling rates of 0.1 to 90°C/min. *
- 0.1 to 0.9°C/min. in 0.1°C/min. steps 1 to 9°C/min. in 1°C/min. steps, 10 to 90°C/min. in 10°C/min. steps*
- Limit set using rotary control knob
- Indefinite hold time
- One ramp per profile
- RS232 interface to allow programming by Linksys software
- 16 character back lit liquid crystal display panel

* Dependent on stage used

The TP94 has been specifically designed to give precise temperature control of the Linkam range of heating/freezing Stages. Digital linearisation of the stage's sensor gives accurate temperature values whilst the function keys have been carefully chosen to allow rapid changes in data values.



The TP94 Temperature Controller

The TP94 is a low cost controller capable of performing a single ramp including: Specified rate of heating and cooling, a limit temperature and an indefinite hold time.

It is also possible to download software upgrades from email via the RS232 cable supplied.

CI94

- Controlled heating rates of 0.01°C to 130°C/min.*
- Controlled cooling rates of 0.01°C to 100°C/min.*
- Up to 100 ramps in one programmable profile
- Displays Temperature to 0.1°C
- Hold time 0 - 9999 mins.
- RS232 interface requires programming by Linksys software
- Software upgrades available by email

*Dependant on stage used.



CI94 Temperature Programmer

The CI 94 is a computer interface only and has no manual control facility. It has a serial RS 232 interface which is connected to the computer via a single cable and does not require a separate interface board for the PC.

The CI94 is programmed using the supplied Linksys temperature control software, Active-X controls or by using a set of serial commands (available on request). This enables the hotstage system to be incorporated into a more complex experimental setup such as FTIR or image analysis.