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PELTIER DEVICES OR REFRIGERATING HEATING CIRCULATORS/BATHS FOR CD MELTING EXPERIMENTS? (PART 2)

In a very early report (T.R. 2 of Feb 2000) same argument was discussed.
Today situation changed slightly and Jasco J-800 users have more/different choices.

Neslab
Thermo NESLAB (Neslab is now part of the Thermo group) changed product range. The proper bath is now named **RTE-7 D+** (digital plus). The unit is easier to use than previous models (for example you do not need to pass through boring keypad operations to switch from software control to manual operation).
Bath still keeps possibility to mount an external Pt-100 temperature sensors and communication protocol is same as previous RTE-111D.
Also RS-232C cable has same wiring:
9 pin female - 9 pin male

2	-	2
3	-	3
5	-	5

Only thing to do is to switch from 19200 to 9600 baud rate as requested from Jasco software (4880-0494D *JWTC-484*), loading the software select the RTE/EX(NC) bath.

Julabo
The Jasco software can now control* Julabo baths too:
F25-HD somehow similar to the Neslab model
F12-MD a cheaper version, with no possibility to fit a remote temperature sensor
In Julabo case the wiring of the RS-232C cable is different:

2	-	3
3	-	2
5	-	5

** ECS has no direct experience using Julabo baths, data reported were kindly submitted by Jasco International and Jasco GmbH.*

The use of baths is however getting less and less popular.
Main reason is cost: while Peltier accessory prices have been stable, price of baths increased continuously. Adding the cost of the Jasco software (expensive!), of a suitable remote sensor and of a micro-stirrer, you come very close to the cost of a full Peltier system which will outperform any bath in terms of speed, with no boring tubes/wires around the bench.

Baths have however the following benefits:
-when you want to thermostat cylindrical or cylindrical water jacketed cells
-when you want to use them also on other instruments or accessories (such as a stopped-flow mixing cell)
-when you miss in the lab the facility to cool down the Peltier element with tap water (or other circulators)

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