

GeneAmp[®] PCR System 9600

Quick Reference Guide



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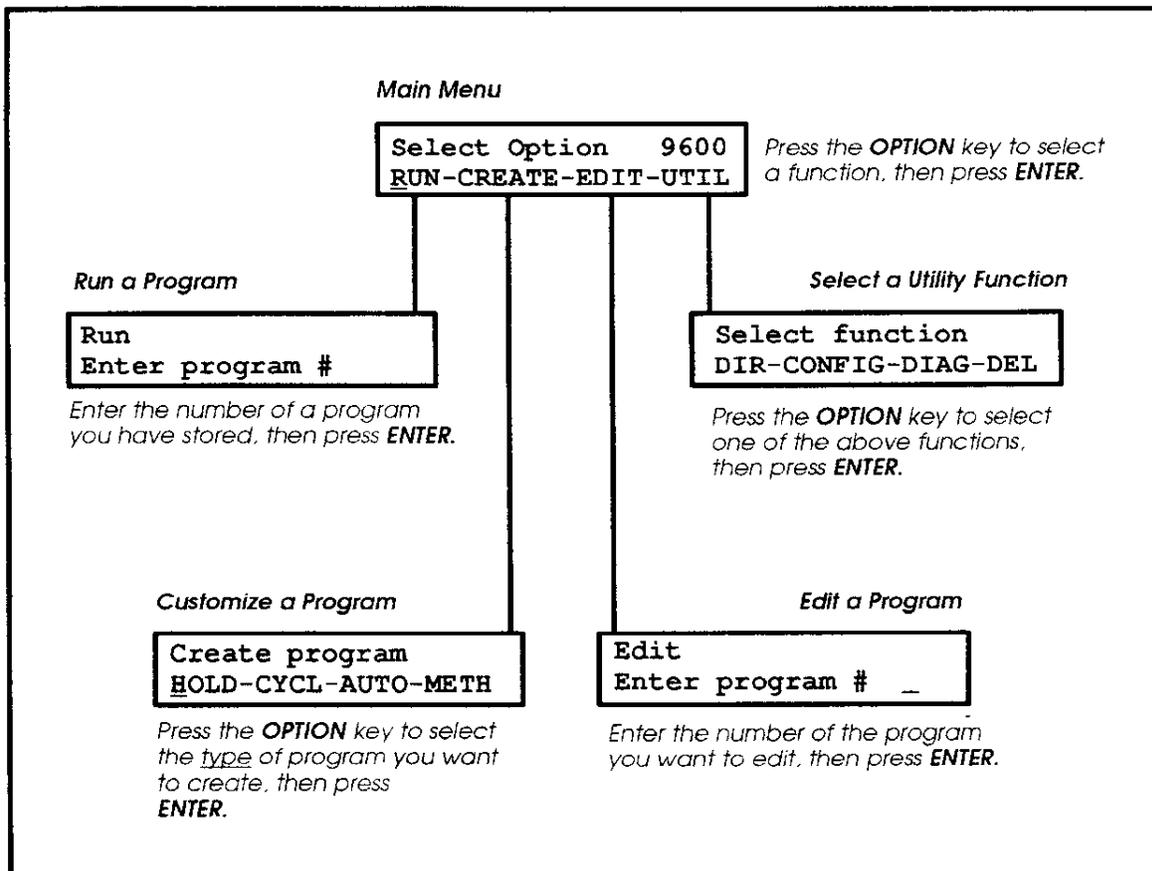
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Manual Part No. 0993-8690 Rev. C

Selecting a Function on the Main Menu

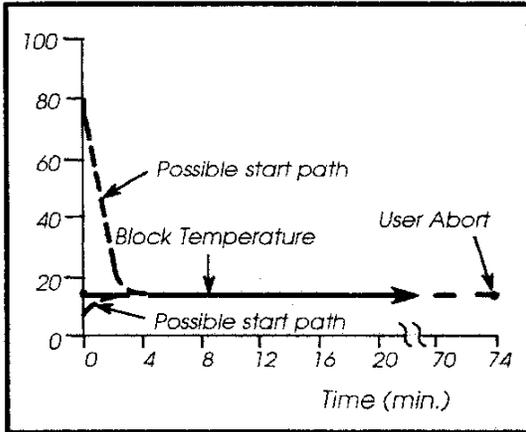
The main menu gives you access to the major functions of the software. When you first turn on the instrument, the main menu appears in a few seconds. If you need to return to the main menu while using other functions of the software, press the **STOP** key one or two times.



HOLD Programs

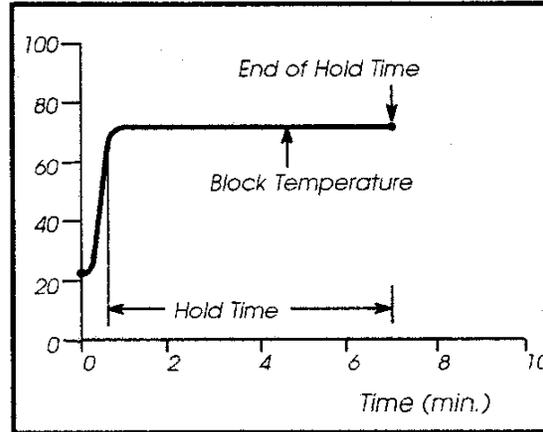
HOLD Forever

One type of HOLD file can hold a single temperature until you abort the run. This type of program is often used for post PCR storage overnight.



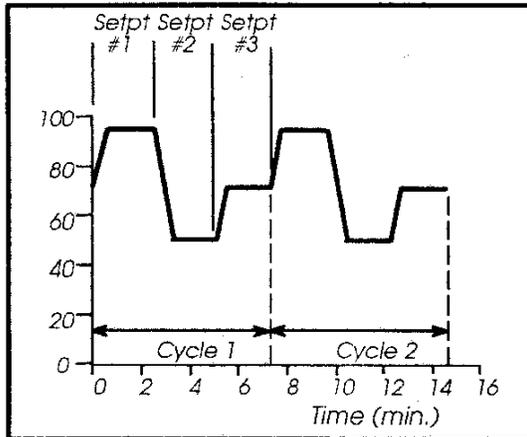
Hold for a Definite Time

Another type of HOLD file can hold a single temperature for a specified period of time. This type of program is often used for pre-PCR denaturation.



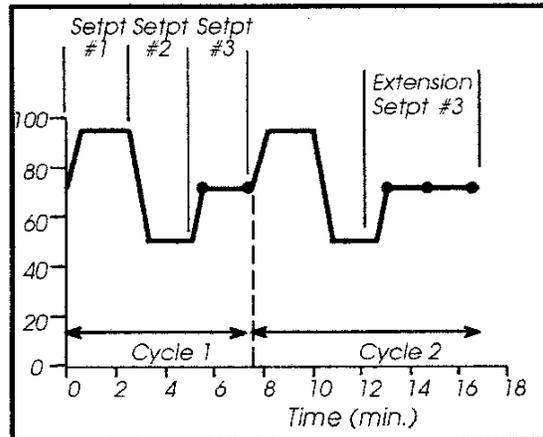
CYCL Program

A CYCL (Cycle) program contains the thermal ramps and hold segments for PCR cycling. Typically, it contains two or three setpoints.



AUTO Program

AN AUTO program allows the user to automatically increment or decrement the setpoint times and temperatures a fixed amount every cycle.



How to Customize a Hold Program

```
Select Option  9600  
RUN-CREATE-EDIT-UTIL
```

On the main menu, press the **OPTION** key to select CREATE, then press **ENTER**.

```
Create program  
HOLD-CYCL-AUTO-METH
```

Press **ENTER** to select HOLD as the type of program you want to create.

```
Hold at  25.0  
Hold FOREVER- 10:00
```

a. Specify the desired temperature in decimal form, then press **ENTER**

```
Hold at  25.0  
Hold FOREVER- 10:00
```

b. Press **ENTER** to accept the default hold time or use the numeric keys to change the hold time, then press **ENTER**. Press **OPTION** if you want an indefinite soak. Press **ENTER** to accept FOREVER.

```
Beep While Hold? NO
```

Specify whether or not you want a beeper to sound during the hold time. Use **OPTION** to change NO or YES and vice versa. Then press **ENTER**.

```
HOLD#???      xx.xC  
RUN-STORE-PRINT-HOME
```

Use **OPTION** to select one of the choices, then press **ENTER**.

Note Selecting RUN will run the file (without storing it). Selecting HOME returns you to the main menu. (Press **STEP** to return to the first program display.)

How to Customize a CYCL Program

```
Select Option 9600
RUN-CREATE-EDIT-UTIL
```

On the main menu, press the **OPTION** key to select CREATE, then press **ENTER**.

```
Create program
HOLD-CYCL-AUTO-METH
```

Press the **OPTION** key to select CYCL as the type of program you want to create, then press **ENTER**.

```
3 Temperature PCR
```

Choose the number of setpoints. Press **ENTER** to accept the default. Or, to change the value, use the numeric keys, then press **ENTER**.

```
Setpt #1 Ramp 0:00
94.0C Hold 0:30
```

Enter the desired time and temperature (in decimal form) for each setpoint:

```
Setpt #2 Ramp 0:00
55.0C Hold 0:30
```

- ◆ Press **ENTER** to accept default value. Or, to change a value, use the numeric keys, then press **ENTER**.

```
Setpt #3 Ramp 0:00
72.0C Hold 0:30
```

- ◆ Use the **STEP** key to skip forward to the next display.

- ◆ Use the **BACK** key to move backward to the previous entry or display.

```
Total cycles = 25
Pause during run? NO
```

For the total number of cycles to be run, use the default or enter a new value. To change the pause option, press **OPTION** to change NO to YES and vice versa. Then press **ENTER**.

If you turn on the pause option, three additional displays appear. See the Users Manual for more information.

```
CYCL#??? xx.xC
RUN-STORE-PRINT-HOME
```

Use **OPTION** to select one of the choices, then press **ENTER**.

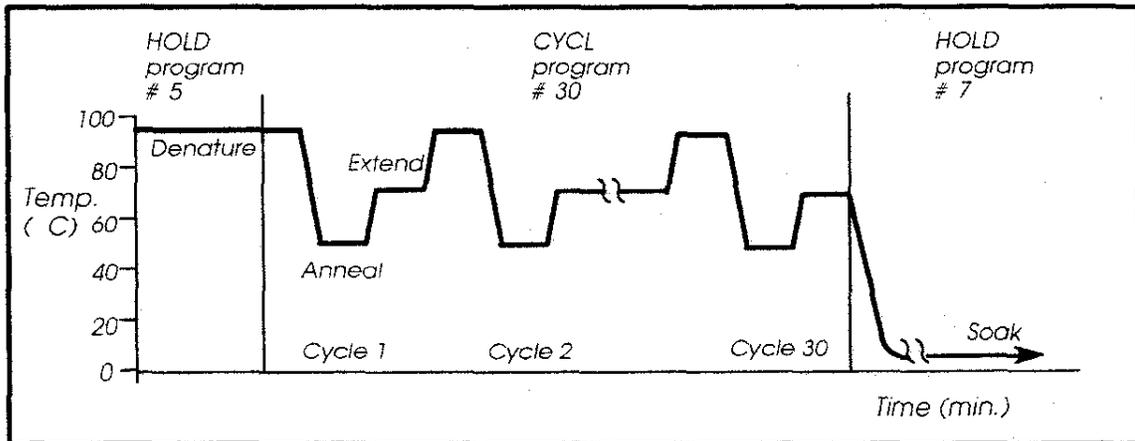
Note Selecting RUN will run the file (without storing it). Selecting HOME returns you to the main menu. (Press **STEP** to return to the first program display.)

Customizing an AUTO Program

<pre>Select Option 9600 RUN-CREATE-EDIT-UTIL</pre>	<p>On the main menu, press the OPTION key to select CREATE, then press ENTER.</p>
<pre>Create program HOLD-CYCL-AUTO-METH</pre>	<p>Press the OPTION key to select AUTO as the type of program you want to create, then press ENTER.</p>
<pre>3 Temperature PCR</pre>	<p>Choose the number of setpoints. Press ENTER to accept the default. Or, to change the value, use the numeric keys, then press ENTER.</p>
<pre>Setpt #1 94.0C Hold for 0:30</pre>	<p>Specify the desired temperature (in decimal form) and hold time for Setpoint #1. Press ENTER after you make each entry.</p>
<pre>Setpt #1 94.0C Change temp/time NO</pre>	<p>Choose whether or not to change the hold time or temperature for Setpoint#1 in successive cycles. Use OPTION to change NO to YES and vice versa, then press ENTER.</p>
<pre>94.0C Delta ↑ 0.0C Delta ↑ 0:00</pre>	<p>If you selected YES:</p> <ol style="list-style-type: none"> Press OPTION to change the arrow direction to indicate an increase or decrease in temperature or time. Then press ENTER. Specify temperatures and/or time increment or decrement, then press ENTER. (Zero indicates no change.)
<pre>Setpt #2 55.0C Hold for 0:30</pre>	<p>For Setpoint #2 and subsequent setpoints, follow the same steps as those for Setpoint#1.</p>
<pre>Setpt #2 55.0C Change temp/time NO</pre>	
<pre>55.0C Delta ↑ 0.0C Delta ↑ 0:00</pre>	
<pre>Total cycles = 25 Pause during run? NO</pre>	<p>Specify the total number of cycles to be run. Use the default value or enter a new value. Press OPTION to change the pause option from NO to Yes and vice versa. Then press ENTER.</p>
<pre>AUTO# 20 xx.xC RUN-STORE-PRINT-HOME</pre>	<p>Use OPTION to select one of the choices, then press ENTER. Or, press STEP to return to the first display.</p>

METH PROGRAM

A METH (Method) program can link together up to 17 programs for a specific PCR application. For example, a method could start with a HOLD file used for pre-PCR denaturation (e.g., 94.0 degrees C for five minutes). This could be followed by a CYCL program for three-temperature PCR. A final HOLD program could conclude the experiment, for post-PCR storage overnight (at 4.0 degrees C, for example).



Creating a Method

<pre>Select Option 9600 RUN-CREATE-EDIT-UTIL</pre>	<p>On the main menu, press the OPTION key to select CREATE, then press ENTER.</p>
<pre>Create program HOLD-CYCL-AUTO-METH</pre>	<p>Press the OPTION key to select METH as the type of program you want to create, then press ENTER.</p>
<pre>Link progs: 5- 30- 7- - - - -</pre>	<p>Specify the numbers of the programs you want to link (e.g., 5, 30, 7). After you make a numeric entry, press ENTER. Press STEP to get to the next display, where you can enter up to ten additional programs. Press STEP again to get to the last display.</p>
<pre>Meth#??? 25.6C RUN-STORE-PRINT-HOME</pre>	<p>Use OPTION to select one of the choices, then press ENTER. Note Selecting RUN will run the method (without storing it). Selecting HOME returns you to the main menu.</p>

How to Store a Program

```
CYCL#???      xx.xC  
RUN-STORE-PRINT-HOME
```

In the last display in the program, press **OPTION** to select STORE, then ENTER.

```
Store  
Enter program #  x
```

Press **ENTER** to accept the displayed program number. Or, specify a new number then press **ENTER**.

```
Store  
Protect program?  NO
```

Press **OPTION** to change NO to YES and vice versa. Then press **ENTER**.

```
Store  
Enter user #  x
```

If you selected YES in the previous display:

Specify a number from 1 to 9999 for your user identification number.

```
Prog #  x  
OK to store?  YES
```

Press **ENTER** to store the program.

How to Edit a Program

- 1 On the main menu, press the **OPTION** key to move the cursor to EDIT, then press **ENTER**.
- 2 Enter the number of the program, then press **ENTER**.
- 3 Edit the program by entering the times and temperatures for your application. Press **ENTER** after a numeric entry. Use the **STEP** key to advance a display. Use the **BACK** key to go back to the previous display or parameter.
- 4 In the last display in the program, you have these options: RUN-STORE-PRINT-HOME. If you wish to store the program, you can overwrite the previous version of the file or store it under a new number.

How to Run a Program

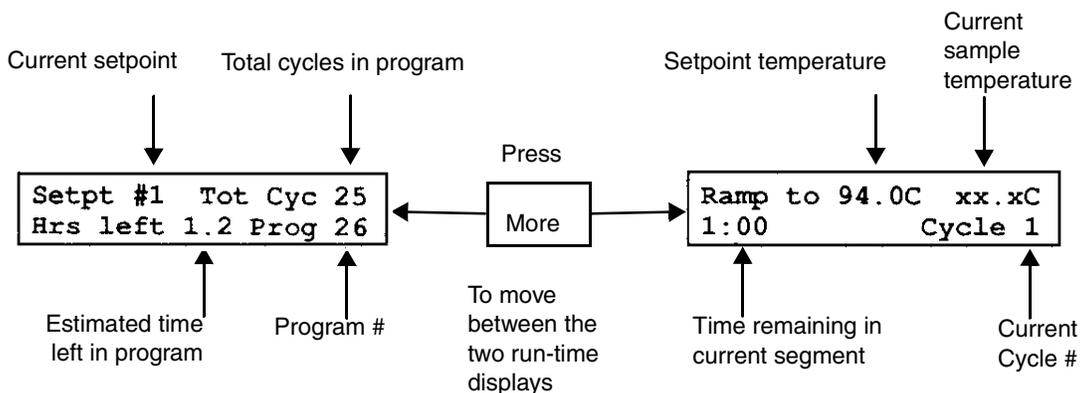
To Run a Program You Have Stored...

- 1 On the main menu, select RUN by pressing **ENTER**.
- 2 Enter the number of the program, then press **RUN**.

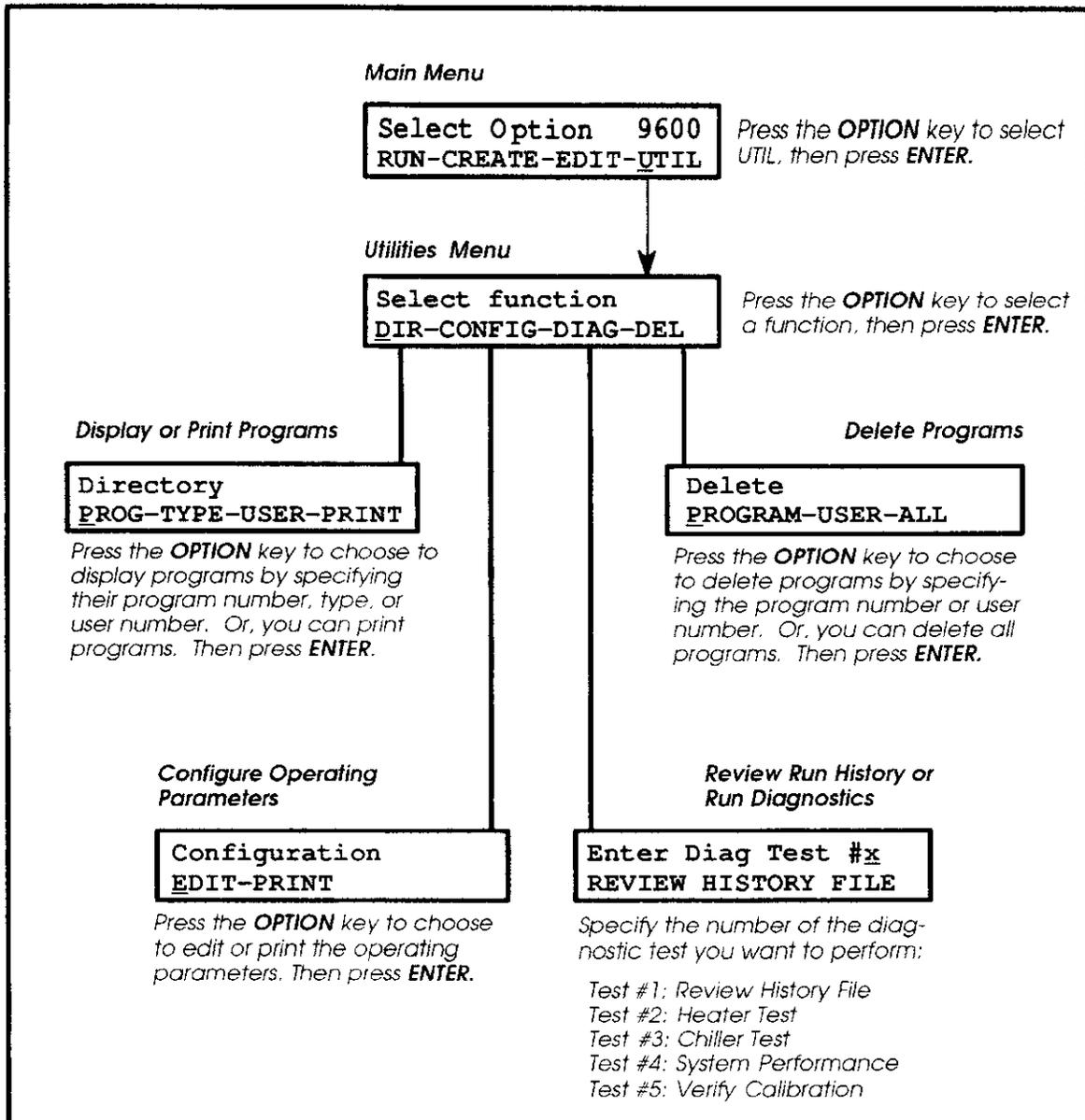
To Run a Program You Have Just Created...

- ◆ In the last display in the program, select RUN by pressing **ENTER**.

Run-Time Displays for CYCL or AUTO programs

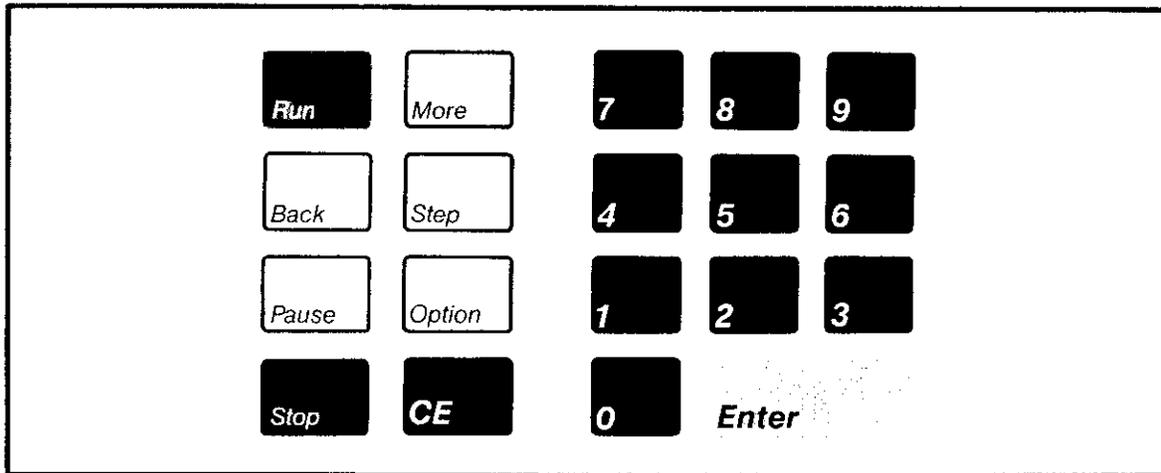


How to Use the Utility Function

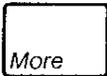
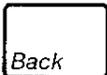
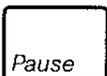
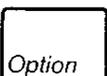


Using the Keypad

The Keypad



The Keys

	Run-time key: Starts or restarts a sample run.		Run-time key: Displays more information about run-time parameters.
	Editing key: Moves the cursor to the previous parameter or display.		Editing key: Moves the cursor to the next parameter or display.
	Run-time key: Interrupts a run.		Editing key: Moves the cursor to your selection. Changes a YES response to a NO and vice versa.
	Run-time and Editing key: Run-time: Aborts a run. Editing: Returns you to the first display in a program or to the main display.		Editing key: Clears the current numeric entry.
			Editing key: Accepts the selection marked by the cursor.

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Protein Sequencing, Peptide and DNA Synthesis	corelab@appliedbiosystems.com
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Product	Hours
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PCR and Sequence Detection	1-800-762-4001 , then press 1 for PCR, 2 for the 7700 or 5700, 6 for the 6700 or dial 1-800-831-6844 , then press 5	1-240-453-4613
Voyager™ MALDI-TOF Biospectrometry and Mariner™ ESI-TOF Mass Spectrometry Workstations	1-800-899-5858 , then press 13	1-508-383-7855
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Peptide Synthesis (Pioneer™ and 9050 Plus Peptide Synthesizers)	1-800-899-5858 , then press 15	1-508-383-7855
PNA Custom and Synthesis	1-800-899-5858 , then press 15	1-508-383-7855
FMAT™ 8100 HTS System and Cytofluor® 4000 Fluorescence Plate Reader	1-800-899-5858 , then press 16	1-508-383-7855

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All other countries not listed (Warrington, UK)	44 (0)1925 282481	44 (0)1925 282509
Japan		
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5	Enter the requested information and your question in the displayed form, then click Ask Us RIGHT NOW (blue button with yellow text).
6	Enter the required information in the next form (if you have not already done so), then click Ask Us RIGHT NOW . You will receive an e-mail reply to your question from one of our technical experts within 24 to 48 hours.

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Headquarters

850 Lincoln Centre Drive
Foster City, CA 94404 USA
Phone: +1 650.638.5800
Toll Free: +1 800.345.5224
Fax: +1 650.638.5884

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