

AMPLIFICATION CFX Manager™ Software Protocol Quick Guide

Run Setup Protocol Tab

The Protocol tab displays a preview of the protocol loaded in the Run Setup window (Figure 1).

Click **Create New** to open the Protocol Editor to create a new protocol.

Click **Select Existing** to launch the file browser to load a protocol to run or to edit.

Use the Express Load dropdown menu to directly load a protocol to run or to edit.

Click **Edit Selected** to open the Protocol Editor to edit the steps of the selected protocol.

Click the **Start Run** tab to start a run with the currently loaded protocol.

Protocol Editor

The Protocol Editor is used to create a new protocol or edit an existing one (Figure 2).

1. Select any step in either the graphical or text display — the step becomes highlighted in blue. Click the temperature or dwell time to directly edit the value.

2. Click **Insert Step** to add a temperature step to the protocol.

Click **Delete Step** to remove a highlighted step from the protocol.

3. Click **Add Plate Read to Step** to designate when fluorescence data will be acquired during the protocol. The text on this button changes to Remove Plate Read if the currently highlighted step has a plate read. If you do not want to acquire data at that step, then click **Remove Plate Read**.

4. Click the number of repeats of a GOTO step to change the number of cycles in the protocol (Figure 2, Step 4).

Click the GOTO step number to change the steps included in the GOTO loop.

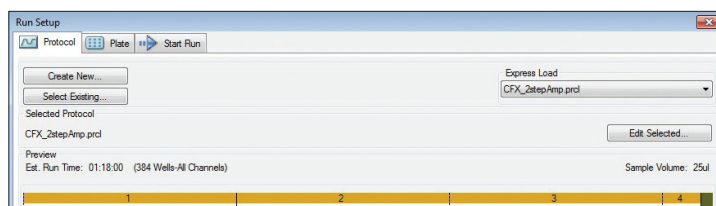


Fig. 1. Protocol tab in the Run Setup window. Load an existing protocol or create a new protocol for a run.

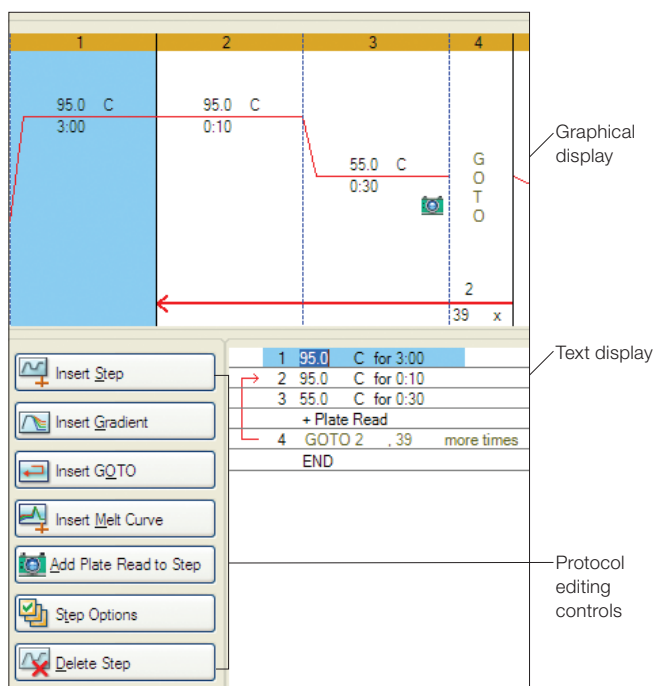


Fig. 2. Protocol Editor. The protocol editing controls are on the left. Both the graphical and text displays can be edited. Step 1 is highlighted and 95°C is selected for editing in the text display.

To add a gradient step:

1. Click **Insert Gradient** in the protocol editing controls (Figure 2).
2. To edit the temperature values for the lowest and highest temperatures in the gradient, click the values in the graphical display, in the text display, or in the gradient range calculator that appears to the right of the text display (Figure 3).
3. Within the gradient range calculator, a specific temperature can be assigned to any row. Each row is then populated with the appropriate temperature to satisfy the specified range.

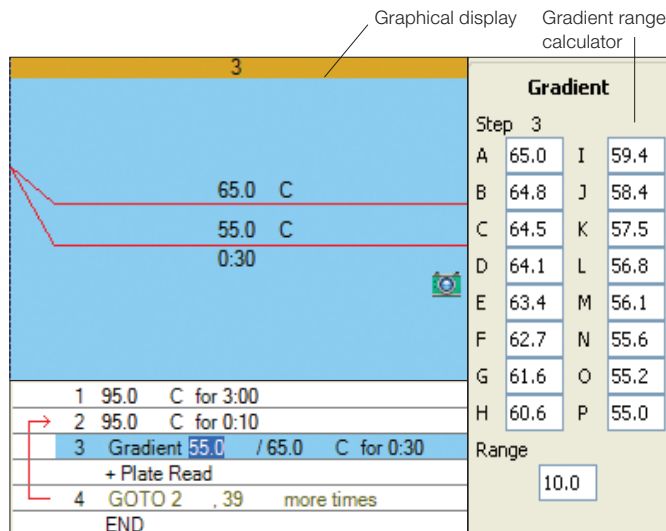


Fig. 3. Insert Gradient step in the Protocol Editor. A gradient step is highlighted in blue in the graphical and text displays of the protocol. The gradient range calculator appears when a gradient is added to the protocol.

To add a melt curve:

1. Click **Insert Melt Curve** in the protocol editing controls (Figure 2).
2. In the graphical or text display, click the temperature values to edit the lowest and highest temperatures of the melt curve range (Figure 4, Step 5).
3. Click the increment value to edit the temperature interval at which data are acquired.
4. Click the dwell time to edit the incubation time for each temperature increment.

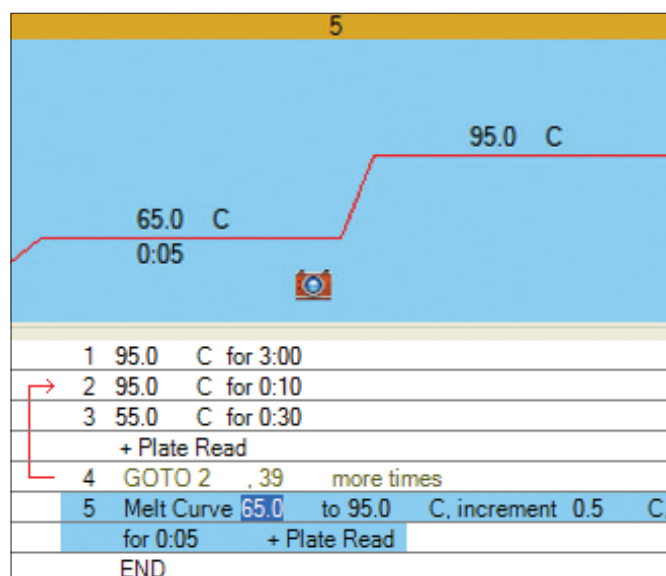


Fig. 4. Insert Melt Curve step in the Protocol Editor. A melt curve step is highlighted in blue in the graphical and text displays of the protocol.

Bio-Rad's real-time thermal cyclers are covered by one or more of the following U.S. patents or their foreign counterparts owned by Eppendorf AG: U.S. Patent Numbers 6,767,512 and 7,074,367.



**Bio-Rad
Laboratories, Inc.**

Life Science
Group

Web site www.bio-rad.com **USA** 800 424 6723 **Australia** 61 2 9914 2800 **Austria** 01 877 89 01 **Belgium** 09 385 55 11 **Brazil** 55 11 5044 5699
Canada 905 364 3435 **China** 86 21 6169 8500 **Czech Republic** 420 241 430 532 **Denmark** 44 52 10 00 **Finland** 09 804 22 00
France 01 47 95 69 65 **Germany** 089 31 884 0 **Greece** 30 210 9532 220 **Hong Kong** 852 2789 3300 **Hungary** 36 1 459 6100 **India** 91 124 4029300
Israel 03 963 6050 **Italy** 39 02 216091 **Japan** 03 6361 7000 **Korea** 82 2 3473 4460 **Mexico** 52 555 488 7670 **The Netherlands** 0318 540666
New Zealand 64 9 415 2280 **Norway** 23 38 41 30 **Poland** 48 22 331 99 99 **Portugal** 351 21 472 7700 **Russia** 7 495 721 14 04
Singapore 65 6415 3188 **South Africa** 27 861 246 723 **Spain** 34 91 590 5200 **Sweden** 08 555 12700 **Switzerland** 026 674 55 05
Taiwan 886 2 2578 7189 **Thailand** 800 88 22 88 **United Kingdom** 020 8328 2000