

# ReadMe

## 7500 Software v2.0.1

For Applied Biosystems 7500  
and 7500 Fast Real-Time PCR Systems

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### OVERVIEW

7500 Software supports both Applied Biosystems 7500 and 7500 Fast Real-Time PCR Systems. This software allows the user to open and analyze experiments generated from either the 7500 or the 7500 Fast system. The software also enables the user to set up experiments, send experiments to the instrument, control the thermal cycling process in the instrument, collect data and analyze the collected data, all in an integrated and streamlined fashion.

7500 Software v2.0.1 contains all features from the previous version 2.0 as well as additional enhancements to quickly set up experiments when using the new *Power SYBR® Green* and *TaqMan® RNA-to-C<sub>T</sub><sup>™</sup> 1-Step Kits*. Version 2.0.1 can either be installed fresh, or be used to upgrade from 7500 Software v2.0, SDS Software v1.4 for the 7500 System, or SDS Software v1.4 for the 7500 Fast System.

## FEATURES

### *Highlights*

- Design Wizards to walk you through experiment design
- Advanced setup option offers flexibility for more complex applications, such as multiplexing
- QuickStart set-up so you can begin a run immediately and enter plate information later
- Pipetting protocols and recipes to set up experiments quickly
- Troubleshooting flags to help you diagnose and resolve problematic experiments
- Email notification when a run is complete
- One-click graphical export to Microsoft® PowerPoint®, Microsoft® Excel®, or directly as a JPEG file

### *Powerful Gene Expression Study Package*

- Import an unlimited number of Comparative Ct (Relative Quantitation) plates to one study
- View data by biological replicate group or technical replicate group
- Normalize to multiple endogenous controls
- Enter known efficiencies to adjust RQ values for each target
- View amplification plot, multicomponent plot and QC summary within the study to easily identify and eliminate outliers
- Preview the effect of modified analysis settings before permanently applying them to results

### *Expanded Melt Curve Options*

- Option to use either a continuous melt for standard post PCR melt curves, or step and hold melt curve for melting experiments that require more resolution and accuracy
- More flexible melt curve protocols allow you to customize the ramp rate, temperature span and data acquisition
- Identify the T<sub>m</sub> of up to three melt curve products per well
- Melt curve data can be imported into the Applied Biosystems High Resolution Melting (HRM) Software for in depth analysis

### *Additional Features Offered in 7500 Software v2.0.1 but not in v2.0*

- Use the Design Wizard, Advanced Setup, or QuickStart to design and set up quantitation experiments using the new RNA-to-C<sub>T</sub><sup>™</sup> *1-Step* Kits. With this version installed, the Design Wizard uses the appropriate default run method for RNA-to-C<sub>T</sub><sup>™</sup> *1-Step* Kits; in the Advanced Setup, the appropriate default run method can be retrieved from the Run Method library.
- Display the relevant reagents in the materials list when you select SYBR<sup>®</sup> Green reagents or TaqMan<sup>®</sup> reagents and the applicable Fast or Standard ramp speed.

- Software enhancements:
  - A warning message is displayed when a Background Calibration run contains up to 5 outliers. This warning is not displayed in version 2.0.
  - In the Design Wizard, when setting up an experiment for the 7500 Fast system to run at the Standard ramp rate, the software will save the Standard ramp rate when saving at the end of the Design Wizard. The experiment is saved with the incorrect (Fast) ramp rate in version 2.0.
  - When saving a single ddCt experiment with *Standard Deviations* as a method of RQ Min/Max calculations **and** efficiency value is set to 100% for ALL targets, the file is no longer corrupt.
  - Software can now open SDS v1.3.0 or v1.3.1 data files containing well(s) with no data collection, i.e. wells were omitted prior to starting the run.

## LICENSE

You must agree to the terms of the license before installing or using the software.

## SYSTEM REQUIREMENTS

The computer hardware and operating system requirements for the 7500 Software are:

- Windows® XP with Service Pack 2 or Windows® Vista
- Pentium 4 or compatible, with minimum 1 GB of RAM and 20 GB of hard drive capacity
- Minimum monitor resolution of 1280x1024
- One v1.1 USB port for connecting to the instrument directly (co-located configuration)
- Internet Explorer 6.0 or higher (for online assay browsing and ordering)
- Microsoft® PowerPoint software (for direct export of PowerPoint slides)
- Microsoft® Excel software (for direct export of data to spreadsheet)

## COMPATIBILITY

- Software installation requires a minimum of 1 GB of random access memory (RAM). To check available memory of a computer and evaluate options for installing additional memory, refer to User Bulletin PN 4379705 (downloadable from Applied Biosystems web site).
- 7500 Software v2.0.1 can be installed on computers to be used with either the 7500 or 7500 Fast System.
- 7500 Software v2.0.1 can either be installed fresh, or be used to upgrade from 7500 Software v2.0, SDS software v1.4 for the 7500 System, and SDS software v1.4 for the 7500 Fast System.

## KNOWN ISSUES

See *Release Notes* for details.

## DOWNLOAD THE SOFTWARE

1. Go to the Applied Biosystems 7500/7500 Fast system web site:
  - [http://marketing.appliedbiosystems.com/mk/get/GEMINI\\_landing](http://marketing.appliedbiosystems.com/mk/get/GEMINI_landing)
2. In the Software Download section, click **Download 7500 Software v2.0.1**.
3. Register using your email address, instrument serial number and contact information. Once registered, the system will automatically send you an email with a link to the software download page. **IMPORTANT:** To receive this email, make sure your email address is subscribed to accept emails from Applied Biosystems.
4. Click on the link within the email.
5. In the Software Downloads page, click the icon for the **7500 Software v2.0.1 for 7500 and 7500 Fast systems**.
6. In the File Download dialog box, click **Save**.
7. In the Save As dialog box, select a folder in which to save the software, click **Save**, then click **Close**.

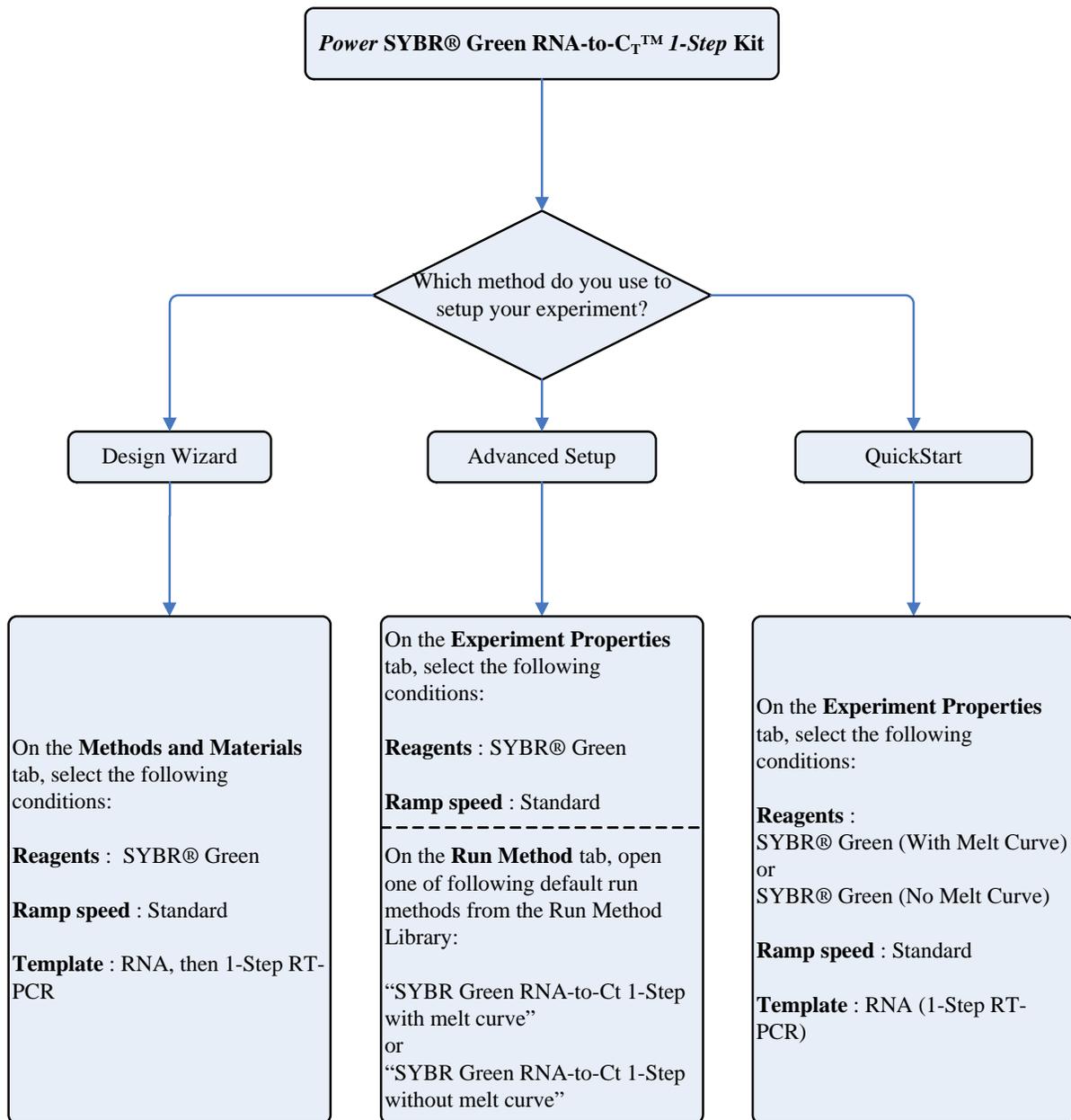
## INSTALL THE SOFTWARE

**IMPORTANT:** To prevent data loss, it is strongly advised that all user data is backed up before upgrading the software.

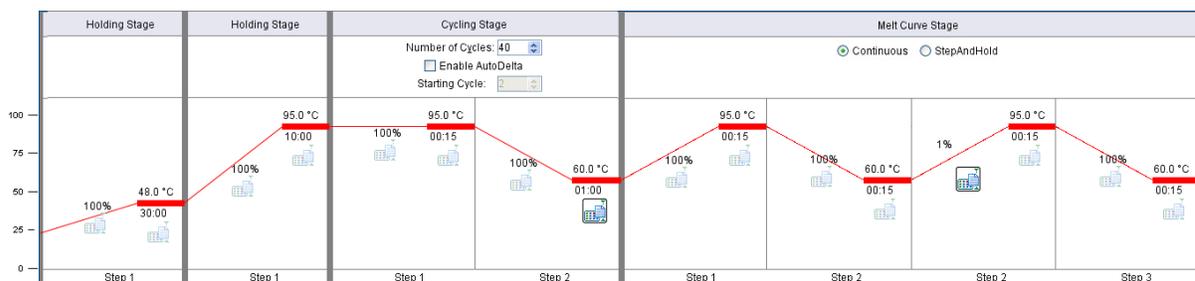
1. Unzip **7500\_Software\_v2.0.1.zip** file that you downloaded.
2. Close any open applications, and then double-click the **setup.exe** file.
3. Follow the InstallWizard onscreen installation instructions.

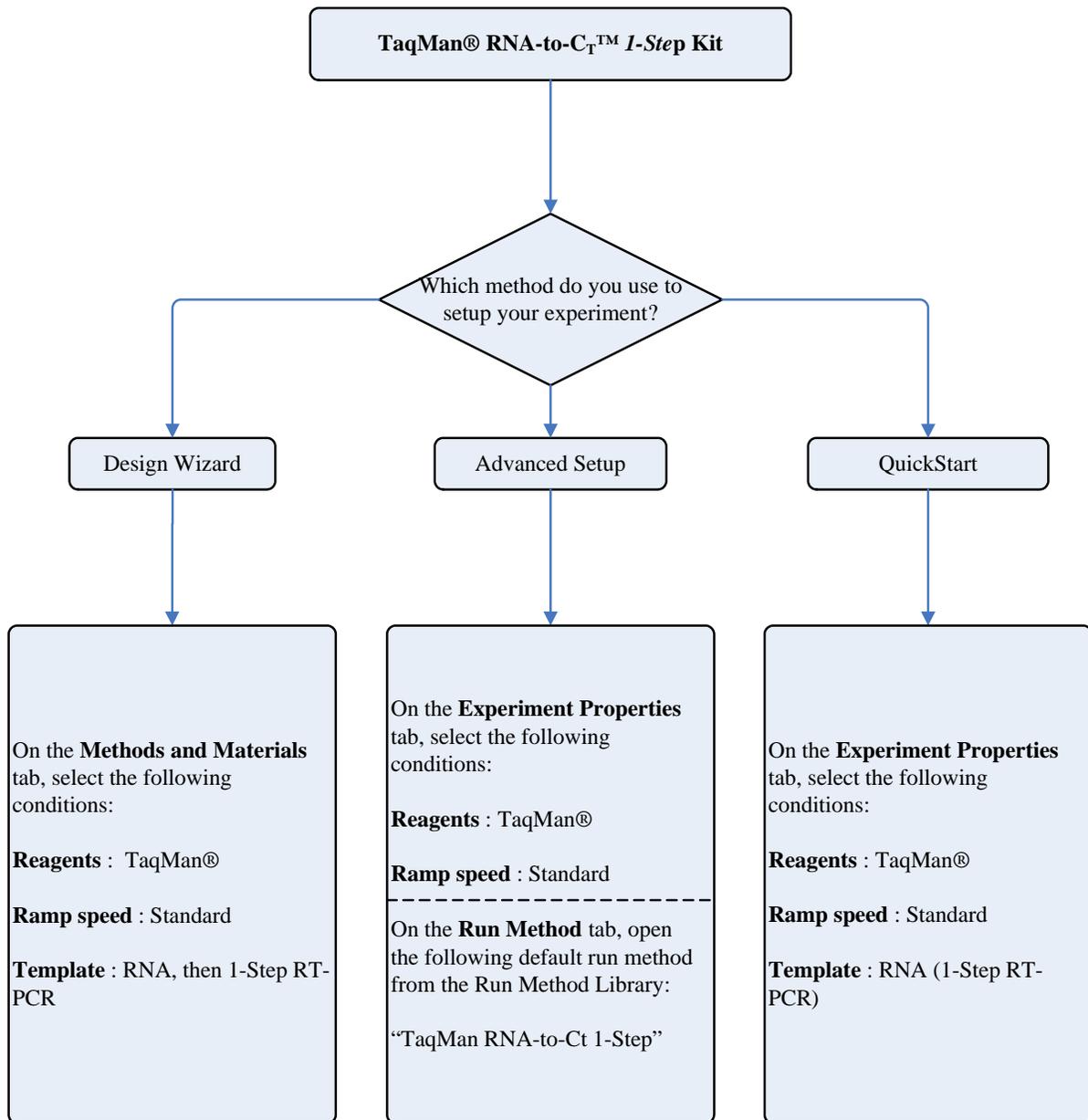
## HOW TO USE THE SOFTWARE WITH THE NEW REAGENTS

For the new reagent you are using (Fast SYBR<sup>®</sup> Green Master Mix or one of the RNA-to-C<sub>T</sub><sup>™</sup> *I-Step* Kits), a corresponding diagram below walks you through the selections within the software so that software displays the appropriate default run method (listed below) for that reagent. Moreover, once you have the appropriate experiment properties defined, the materials list will be updated accordingly for the convenience of ordering.



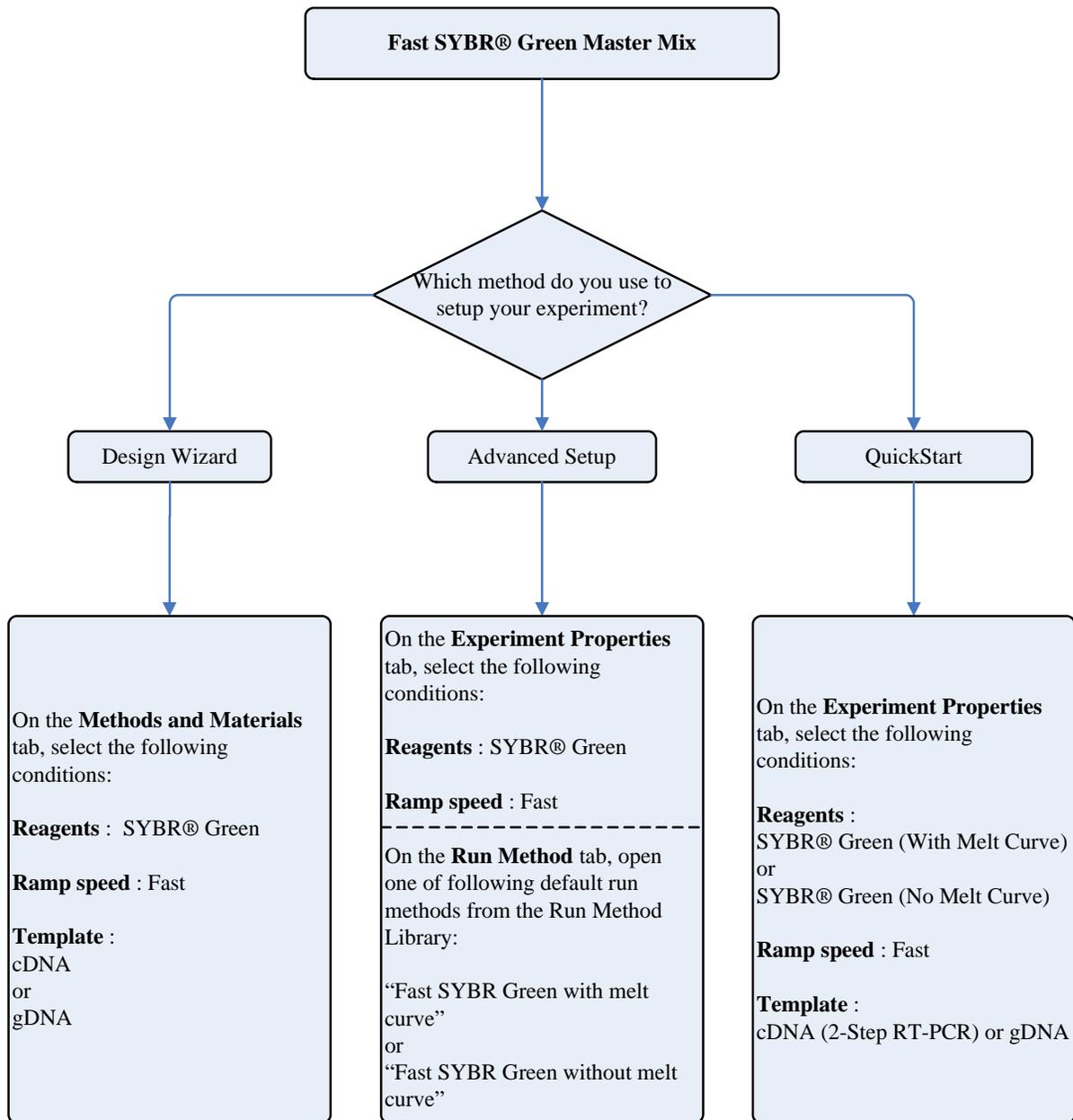
**Default run method for Power SYBR® Green RNA-to-C<sub>T</sub>™ 1-Step Kit**



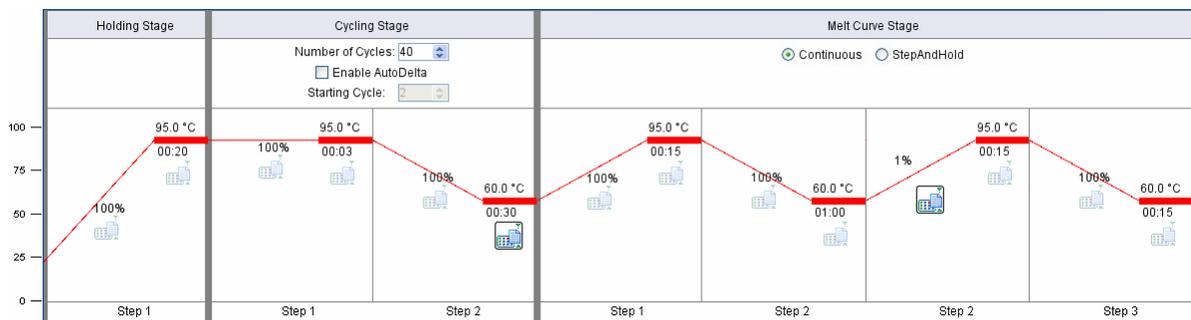


**Default run method for TaqMan® RNA-to-C<sub>T</sub>™ 1-Step Kit**





**Default run method for Fast SYBR® Green Master Mix**



## **UNINSTALL THE SOFTWARE**

**IMPORTANT: To prevent data loss, it is strongly advised that all user data is backed up before uninstalling the 7500 software.**

- From Windows “Start” button, find the “Applied Biosystems/7500 Software” program group.
- Click on “Uninstall 7500 Software v2.0.1”.
- A wizard shows up. Follow the instructions and complete the uninstall operation.
- Optionally, rename or delete the home directory of the 7500 Software application. This ensures a clean environment for the next (clean) installation.

## **LEGAL STATEMENTS**

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