User Bulletin

ABI PRISM[®] 377 DNA Sequencer

December 10, 1999

SUBJECT: New Data Collection and Sequence Analysis Software Installation Guidelines and Fifth-Dye Sequencing

Overview This bulletin describes the changes in the new versions of the ABI PRISM[®] 377 Data Collection Software and ABI PRISM[®] DNA Sequencing Analysis Software for the ABI PRISM[®] 377 DNA Sequencer and gives the procedures to use the new data collection software with the ABI PRISM[®] Lane Guide[™] Lane Identification reagents.

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Safety

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Documentation User Attention Words	Five user attention words appear in the text of all PE Biosystems user documentation. Each word implies a particular level of observation or action as follows.
	Note This word is used to call attention to information.
	IMPORTANT This word calls attention to information that is necessary for correct operation of the kit or instrument.
	CAUTION This word informs the user that damage to the instrument could occur if the user does not comply with the information. It also indicates a potentially hazardous situation that could result in minor or moderate injury to the user.
	! WARNING ! This word informs the user that serious physical injury or illness to the user or other persons could occur if these required precautions are not taken.
	! DANGER ! Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.
General Warning	! WARNING ! CHEMICAL HAZARD. Some chemicals used with PE Biosystems instruments or kits may be hazardous and can cause injury, illness, or death. Check regularly for chemical leaks and chemical spills, which represent potential safety hazards to the operator. If a leak or a spill occurs, follow clean-up instructions in the Material Safety Data Sheets (MSDSs), or in the Waste Profile in the Site Preparation and Safety Guide. Hazardous Chemical Warnings are prominently displayed on the labels of all hazardous materials. Always read the appropriate MSDSs and Waste Profiles before using the chemicals in any way.
User Safety Precautions	Always wear the appropriate protective gloves, clothing, and eyewear when handling chemicals.
Ordering MSDSs	Material Safety Data Sheets (MSDSs) for hazardous chemicals manufactured by PE Biosystems will accompany your first shipment. To receive additional copies of MSDSs at no extra cost, call PE Biosystems at (800) 327-3002.
	For chemicals required for this instrument but not manufactured or sold by PE Biosystems, please obtain the MSDSs from their manufacturers.
Ordering Kits and Reagents	To order ABI PRISM kits or reagents, please contact PE Biosystems at one of the regional sales offices listed in the Technical Support section of this user bulletin. Please have the part number of the kit or reagent you are ordering available when ordering.

Product Overview

About Lane Guide Reagents	The Lane Guide reagents add fifth dye labeled bands to the lanes in which they are loaded, greatly improving lane identification, even under conditions of multiple adjacent sample failures or migration anomalies.
	Using Lane Guide reagents in gels run on the ABI PRISM 377 DNA Sequencer helps you identify each sample in a gel.
	Only sequencing analysis software currently supports the use Lane Guide reagents. ABI PRISM [®] 377 GeneScan Analysis Software does not support the use of Lane Guide reagents at this time.
About the Software	There are occasions when a gel includes so many failed reactions that it is impossible to be certain of sample identities. The Lane Guide reagents combined with data collection and sequencing analysis software provide an integrated solution to this serious problem.
	Instrument software has been upgraded to provide fifth dye virtual filter capability to all ABI PRISM 377 instruments except the 377-18 instrument. The Lane Guide [™] Neural Net Tracker has been upgraded so that it can use the bands produced by the Lane Guide reagents for improved lane detection, assignment, and tracking.
	Instrument software has also been upgraded with new features and improvements.
Benefits	The combination of Lane Guide reagents and the firmware, data collection, and sequencing analysis software upgrades provides users:
	 Cost savings in reagents
	Cost savings in labor
	 Time savings in troubleshooting
	Time savings in retracking
	 A high degree of confidence in lane assignments

Key Features of the Software Upgrades

Introduction Data collection software has been upgraded to enhance the capabilities of the 377 base model, XL, and 96-Lane instruments with a fifth virtual filter capability. In addition, a number of other new features have been added.

Sequencing analysis software has also been upgraded with a new tracker that makes use of the fifth dye.

Data Collection Version 2.6

Data Collection The table below lists and describes the new software features.

Feature	Description
Sequencing support for a fifth dye	Sample sheets and run sheets can now support five dyes. Sample sheets are configured as either 4- or 5-dye sample sheets.
Dynamic link between sample sheet and run sheet	Sample sheets and run sheets are now linked when the sample sheet is chosen from within the run sheet. Any samples that are added and saved to the sample sheet are automatically updated on the run sheet. Once a run is complete, the run sheet is unlinked, preserving the history of run sheets from completed runs.
Applescript [®] support	This application now supports an Apple event that lets you import a text file. The information from the text file is used to fill out a sample sheet and, optionally, a run sheet based on the imported sample sheet.
New module files	New 5-dye sequencing analysis E module files have been added. GeneScan E module files have been added, supporting the dRhodamine SNaPshot [™] protocol. When a Sequencing run sheet is based on a 5-dye sample sheet, only 5-dye module files are available for selection.
Error log	Any data that is incorrect and cannot be corrected is noted in the error log. The error log can now display up to 1 MB of text.
No changes to instrument files	There is no need to make a new instrument file when using Lane Guide reagents.

Sequencing Analysis Software Version 3.4

Sequencing Analysis The table below lists and describes the new software features.

Feature	Description
Lane Guide Neural Net Tracker	The tracker has been upgraded to use the bands produced by Lane Guide reagents in lane identification and in the development of confidence values.
ABI PRISM [®] BioLIMS Genetic Information Management System compatibility	Sequencing analysis software is now compatible with BioLIMS v. 2.0.1.
ABI PRISM [®] Factura Feature Identification Software update	Factura software is updated to v. 2.2.2. The new Factura software is also compatible with BioLIMS v. 2.0.1.

Obtaining the New Products

System	♦ Macintosh [®] PowerPC proces	ssor	
Requirements	Mac OS 7.6.1 and later		
	 For all instruments, no cl 	hange is required to the existing M	ac OS
	♦ 32 MB RAM minimum, 64 M	B RAM recommended	
Hardware Requirements	A small number of instruments h bands produced by Lane Guide on page 16 for the procedure to	ave a long pass filter that does not reagents. Please see "Testing the I test your instrument.	work with the _ong Pass Filt
low to Download	Software updates for data collection and sequencing analysis software can be downloaded from the PE Biosystems web site: http://www.pebio.com/ab/techsupp/swpps/377sw.html		
	http://www.pebio.com/ab/techsup	pp/swpps/377sw.html	
How to Order	http://www.pebio.com/ab/techsup The following software and Lane representative (please see "Orde	op/swpps/377sw.html Guide kits can be ordered from yo pring Kits and Reagents" on page 2	ur PE Biosyst 2):
How to Order	http://www.pebio.com/ab/techsup The following software and Lane representative (please see "Orde Item	op/swpps/377sw.html Guide kits can be ordered from yo ering Kits and Reagents" on page 2 Requirement	our PE Biosyste 2): Part Number
How to Order	http://www.pebio.com/ab/techsup The following software and Lane representative (please see "Orde Item ABI PRISM Data Collection Software, Version 2.6-01 update	op/swpps/377sw.html Guide kits can be ordered from yo ering Kits and Reagents" on page 2 Requirement Any earlier version of data collection software	our PE Biosyst 2): Part Number 4313657
How to Order	http://www.pebio.com/ab/techsup The following software and Lane representative (please see "Orde Item ABI PRISM Data Collection Software, Version 2.6-01 update ABI PRISM Data Collection Software, Version 2.6-XL update	op/swpps/377sw.html Guide kits can be ordered from youring Kits and Reagents" on page 2 Requirement Any earlier version of data collection software Any earlier version of XL data collection software	ur PE Biosyst 2): Part Number 4313657 4313658
How to Order	http://www.pebio.com/ab/techsup The following software and Lane representative (please see "Orde Item ABI PRISM Data Collection Software, Version 2.6-01 update ABI PRISM Data Collection Software, Version 2.6-XL update ABI PRISM Data Collection Software, Version 2.6-96 update	op/swpps/377sw.html Guide kits can be ordered from yoering Kits and Reagents" on page 2 Requirement Any earlier version of data collection software Any earlier version of XL data collection software Any earlier version of 96-lane data collection software	ur PE Biosystr 2): Part Number 4313657 4313658 4313659
How to Order	http://www.pebio.com/ab/techsup The following software and Lane representative (please see "Order Item ABI PRISM Data Collection Software, Version 2.6-01 update ABI PRISM Data Collection Software, Version 2.6-XL update ABI PRISM Data Collection Software, Version 2.6-96 update ABI PRISM Sequencing Analysis Software, Version 3.4 upgrade	op/swpps/377sw.html Guide kits can be ordered from youring Kits and Reagents" on page 2 Requirement Any earlier version of data collection software Any earlier version of XL data collection software Any earlier version of 96-lane data collection software Sequencing analysis software earlier than Version 3.0	ur PE Biosyste 2): Part Number 4313657 4313658 4313659 4313075
How to Order	http://www.pebio.com/ab/techsup The following software and Lane representative (please see "Orde Item ABI PRISM Data Collection Software, Version 2.6-01 update ABI PRISM Data Collection Software, Version 2.6-XL update ABI PRISM Data Collection Software, Version 2.6-96 update ABI PRISM Sequencing Analysis Software, Version 3.4 upgrade ABI PRISM Sequencing Analysis Software, Version 3.4 update	op/swpps/377sw.html Guide kits can be ordered from yoering Kits and Reagents" on page 2 Requirement Any earlier version of data collection software Any earlier version of XL data collection software Any earlier version of 96-lane data collection software Sequencing analysis software earlier than Version 3.0 Sequencing analysis software Version 3.0 or higher	ur PE Biosyst 2): Part Number 4313657 4313658 4313659 4313075 4313076
How to Order	http://www.pebio.com/ab/techsupThe following software and Lane representative (please see "OrderItemABI PRISM Data Collection Software, Version 2.6-01 updateABI PRISM Data Collection Software, Version 2.6-XL updateABI PRISM Data Collection Software, Version 2.6-96 updateABI PRISM Sequencing Analysis Software, Version 3.4 upgradeABI PRISM Sequencing Analysis Software, Version 3.4 updateLane Guide 200 Reaction Kit	op/swpps/377sw.html Guide kits can be ordered from youring Kits and Reagents" on page 2 Requirement Any earlier version of data collection software Any earlier version of XL data collection software Any earlier version of 96-lane data collection software Sequencing analysis software earlier than Version 3.0 Sequencing analysis software Version 3.0 or higher 200 reactions	ur PE Biosyste 2): Part Number 4313657 4313658 4313659 4313075 4313076 4313682
How to Order	http://www.pebio.com/ab/techsup The following software and Lane representative (please see "Orde Item ABI PRISM Data Collection Software, Version 2.6-01 update ABI PRISM Data Collection Software, Version 2.6-XL update ABI PRISM Data Collection Software, Version 2.6-96 update ABI PRISM Sequencing Analysis Software, Version 3.4 upgrade ABI PRISM Sequencing Analysis Software, Version 3.4 update Lane Guide 200 Reaction Kit	op/swpps/377sw.html Guide kits can be ordered from yoering Kits and Reagents" on page 2 Requirement Any earlier version of data collection software Any earlier version of XL data collection software Any earlier version of 96-lane data collection software Sequencing analysis software earlier than Version 3.0 Sequencing analysis software Version 3.0 or higher 200 reactions 1000 reactions	ur PE Biosyst 2): Part Number 4313657 4313658 4313659 4313075 4313076 4313076 4313682 4313677

Installing and Setting Up the New Software

Before Starting the Before installing the new software, you must remove the preferences file of the old Installation software to prevent any conflicts. You also need to record the CCD pixel position.

To obtain the CCD pixel position value:

Step	Action
1	Open the data collection software.
2	Under Window in the main menu, select Manual Control.
	The Manual Control window opens:
	Manual Control
	Fxn Fxn Name Yalue Range 1 Electrophoresis On \$ No Value No Range
	Module: >>>>mailto: mailto:scale <a href="mai</th>
3	Using the Fxn Name pull-down menu, select CCD Pixel Position: Fxn Name • Electrophoresis On Electrophoresis Off Electrophoresis Current Electrophoresis Current Electrophoresis Dover Laser Standby Laser Rower Pump Dn Pump Dn Calibration File Send CCD Diset CCD Pixel Position External Cooler Df (Relay 4) External Cooler Dn (Relay 4)
4	Record the number that appears in the Value box: Fxn Name Yalue 77 CCD Pixel Position 200
5	Close the Manual Control window and quit the data collection software.

To remove the preferences file:

Step	Action
1	Open the System Folder on your Macintosh hard drive.
2	Find and open the Preferences folder.
3	Find and throw away the appropriate data collection preferences file for your instrument:
	◆ ABI 377
	♦ ABI 377XL or
	◆ ABI 377-96

To remove the preferences file: *(continued)*

Step	Action
4	Verify the ABI 377 calibrations file exists.
	Do not throw away the calibrations file.
	IMPORTANT If the calibrations file does not exist, you must make one. Please refer to the <i>ABI PRISM DNA Sequencing Analysis Software User's Manual</i> (P/N 4306158) for the procedure for making a calibrations file.
5	Close your Macintosh hard drive folder.

How to Install Both data collection updates and upgrades can be installed using the same procedure.

Note To install the new ABI PRISM Sequencing Analysis Software, please refer to the ABI PRISM DNA Sequencing Analysis Software User's Manual.

|--|

Step	Action
1	Download the desired new software from the web site, or insert the CD into the CD-ROM drive.
2	Find and double-click the installer icon:
	The main installer window opens.
3	Click the Continue button.
	A window with installation instructions and other important information opens.

To install the new firmware and data collection software: *(continued)*

Step	Action
4	You can read the installation instructions by scrolling through the text with the scroll
	bar on the right of the window. You can also print or save the contents.
	When you are ready to proceed with the installation, click the Continue button.
	ABI Prism™ 377-96 Data Collection v.2.6
	Installation Instructions
	In order to install the ABI Prism™ 377-96 Data Collection Package, perform the following steps:
	 Double-click the file "Collection Installer" to launch the installer application. Click the Continue button in the splash screen window. Select the target volume for the installation. Click the Install button in the installer dialog window. After the installation is finished click the Quit button to finish the installer session.
	Important Notes
	• Please make sure that any existing versions of the ABI Prism [™] 377-96 Data Collection application on your computer are not running before you begin the installation procedure. If you do have a version of ABI Prism [™] 377-96 Data Collection running please quit it before beginning installation.
	Print Save As Continue
	The Collection Installer window opens.
5	The default installation location is the local hard disk.
	If you wish to specify a different location, use the pop-up menu at the bottom of the window:
	Install Location
	The folder " HD USABDRND.TECH_COMM_1 Install Location: V SCM Select Folder
6	When ready, click the Install button.
	A window appears showing the progress of the installation. When complete, the final installation window appears.
	Installation was successful. If you are finished, click Quit to leave the Installer. If you wish to perform additional installations, click Continue. Continue Quit
7	Click the Quit button to exit the Installer.

Minimize the Loading and updating preferences and opening run sheets now takes significantly Number of Module Ionger than with earlier versions of the data collection software. Files Files

² Each time the collection software opens the preferences or run sheet window, it must sort through the 4- and 5-dye modules in the module folder before opening the window. You can reduce the time it takes for the collection software to open these windows by minimizing the number of module files in the module folder.

To minimize the number of module files:

Step	Action
1	Locate and open the ABI PRISM 377 (377XL or 377-96) folder.
2	Open the Modules folder.
3	Identify and select all module files which you will not be using regularly.
4	Move the selected module files to the Unused Modules folder.

Set Preferences The procedure for setting the preferences differs from that for earlier versions of the collection software.

IMPORTANT Loading and updating the new preferences now takes significantly longer than with earlier data collection software versions. Please see "Minimize the Number of Module Files" on page 8 for the procedure to reduce this time.

To set the preferences:

Step	Action
1	Open the data collection software.

Step	Action							
2	The data collection opened.	software requires that all the preferences be set when it is first						
	Using the following example and the table below, select the appropriate folder fo each prompt as follows.							
	Select Sample Sheet Folder. Prompt ③ ABI Prism™ 377 ▼ □ untitled ○ Chiller Modules Extensions ○ Firmware Image Desktop ○ Modules □ ○ Sample Sheets Open ○ Select "Sample Sheets" Selections							
	Folder ^a	Action						
	Sample Sheets	Highlight the Sample Sheets folder and click the Select "Sample Sheets" button.						
	Modules	Highlight the Modules folder and click the Select "Modules" button.						
	Runs	Highlight the Run folder and click the Select "Runs " button, or locate a folder in which you want the data to be stored and select that folder.						
	Firmware Image	Highlight the Firmware Image folder and click the Select "Firmware Image" button.						
	Settings The data collection software automatically sets to the a Prism folder inside the System folder.							
	GeneScan ParameterbLocate and open the ABI Prism GeneScan folder, highlight the GS Parameters folder, and click the Select "GS Parameters Folder" button.GeneScan StandardsbLocate and open the ABI Prism GeneScan folder, highlight the GS Standards folder, and click the Select GS Standards Folder button.							
	a. The folder name va	aries depending on the version of data collection software used.						

Step	Action						
3	Action If you have not installed the GeneScan software, select the ABI Folder or Chiller Modules folder for the two GeneScan preferences requested as shown below. Select GeneScan Parameters Folder. System Folder If ABI Folder I						
4	software is opened. From the Window menu select Preferences, then select File Names. a. Enter the desired file or folder name in the appropriate field. b. Open the associated pull-down menu to specify the date and time (<date>), or nothing (<none>) as a suffix. Preferences Page: File Names Page: File Names Page: File Names Run Folder Results Folder- <date> Run File Run- <date> Sample File Cancel OK</date></date></none></date>						

Step	Action						
5	From the Page menu select Sequence Sample Sheet Defaults.						
	a. Open the DyeSet/Primer or Instrument File pull-down menu.						
	b. Select the desired file from the pull-down menu.						
Proforoncos							
	Preferences						
	Page: Sequence Sample Sheet Defaults						
	DyeSet/Primer DT {BD Set Any-Primer}						
	Instrument 🛛 Instrument File Eeyore 🗢						
	Cancel OK						
6	From the Page menu select Sequence Run Defaults.						
	Preferences						
	Page: Sequence Run Defaults						
	4Dye PreRun Module Seq PR 36E-24 🜩 4Dye Run Module Seq Run 36E-2 ¢						
	5 Dve PreRun Module Sea PR 36E5-2 🗣 5 Dve Run Module Sea Run 36E5 🗣						
	Huddharyze with Dap.sequencing Hiarysis S						
	🔲 Auto Print						
	Cancel OK						
	modules, and the number of lanes:						
	a. Open the pull-down menu for each parameter.						
	b. Select the desired default setting.						
7	To specify that data be automatically analyzed by the sequencing analysis software:						
	a. Select the Autoanalyze with check box.						
	b. Open the Autoanalyze with pull-down menu and select Other.						
	c. Locate and double-click the analysis application you want to use.						
8	To specify that data be printed automatically at the end of each run, select the Auto						
	Print check box.						

Step	Action							
9	From the Page menu select General Settings.							
	a. Type in the instrument name or serial number.							
	b. From the 4Dye Plate Check Module and 5Dye Plate Check Module pull-down menus, select the desired module.							
	Preferences							
	Page: General Settings							
	Instrument Name Eeyore							
	Global Serial Number 1000 Suppress Left/Right Averaging 4Dye Plate Check Module Plate Check E 5 Dye Plate Check Module Plate Check \$							
	Modem Printer No Port							
	Minimum Number of Scans 12000							
	Cancel							
	Note You will also have to reset preferences for both GeneScan and BioLIMS software, if you use these applications. Please see "Setting Preferences" on pages 5-1 to 5-20 in the <i>ABI PRISM 377 DNA Sequencer User's Manual</i> (P/N 4307164).							
10	Click OK when finished.							

Download theIf you have a version of firmware earlier than v. 2.5, you will be prompted to downloadFirmwarethe new firmware to the 377 instrument. This requires a total reset.

To perform a total reset:

Step	Action						
1	Using the eraser end of a pencil or similar object, press the red reset button on the back of the instrument twice in rapid succession.						
	Note To be sure the old firmware has been removed, check the front panel lights. You should see the yellow light blinking.						
2	Open the data collection software.						
	The firmware is automatically downloaded to the instrument. This will take 60–90 seconds.						

For information on troubleshooting firmware, please refer to "About Troubleshooting Firmware" on page 4-21 in the *ABI PRISM 377 DNA Sequencer User's Manual.*

Sending CCD Pixel Position and Instrument Serial Number

Sending CCD Pixel The CCD pixel position and instrument serial number must be sent to the 377 Position and instrument after loading v. 2.5 of the firmware.

Note The following procedure requires a valid calibration file. To update or create one, please refer to "CCD Pixel Position Value" on page 4-25 and "Using Calibration File Make and Send" on page 4-27 in the *ABI PRISM 377 DNA Sequencer User's Manual*.

To send a valid calibration file:

Step	Action							
1	Make sure the 377 instrument is turned on.							
2	From the Window menu of the data collection software, select Manual Control.							
3	Open the Fxn Name pull-down menu and select Calibration File Send.							
4	Click Execute . The CCD pixel position value and instrument serial number are sent to the 377							
	instrument.							
5	Quit the data collection software.							

Folder Setup	The organization of the data collection software folders and files remains the same as in previous versions. For more information, refer to "Data Collection Software" in the <i>ABI PRISM 377 DNA Sequencer User's Manual.</i>			
Verify Long Pass Filter	Before using Lane Guide reagents for the first time, test the long pass filter on your instrument. A small number of long pass filters will not detect the bands produced by Lane Guide reagents. Please see "Testing the Long Pass Filter" on page 16 for the procedure to test your instrument.			

Testing the Long Pass Filter

Long Pass Filter Test Before using the Lane Guide reagents for the first time, perform the following test to verify your instrument will detect fifth dye bands. A gel, new or used, is required for this test.

To test the long pass filter:

Step	Action					
1	Power up the 377 instrument.					
2	Mount a cassette containing a new or used gel.					
3	Open the data collection software.					
4	Select File from the menu bar, then select New.					
	The Create New box appears.					
5	Click the Sequence Run icon.					
	The Run window appears.					
6	In the box next to Plate Check Module, click the arrows.					
	Run-9/17/99 3.53 PM Plate Check Plate Check Plate Check filter PreRun Pause Collect time Collect time Collect time Collect time Run Module Collect time Collect time					
7	Click the Plate Check button.					
	A plate check runs using the selected module.					

To test the long pass filter: (continued)



Loading the Gel

Gel Loading Procedure	For the procedures for using the Lane Guide reagents and for preparing and loading your samples, please refer to the protocol that accompanies the Lane Guide kits, <i>ABI PRISM Lane Guide Lane Identification Kit</i> (P/N 431804).					
	IMPORTANT The tracker software will not function correctly unless these procedures and guidelines are followed.					

Using the Data Collection Software

Introduction The procedure for using the data collection software remains the same except for the choice of the 5 Dyes setting.

Create a Fifth Dye	To crea	te a sample sheet wh	nen using Lane (Guide reage	nts:		
Lane Identification	Step	Action					
Sample Sneet	1	Open the data collection software.					
	2	Select File from the r	menu bar, then sel	ect New.			
		The Create New box	appears:				
		Create new:					
		Sequence GeneScan [™] Run Run	B ■ Sequence GeneS Sample Sam	Can™ (Canc	:el		
	3	Click the Sequence S	Sample icon.				
		A new untitled Samp	le Sheet window ap	opears as sho	own below.		
	□ Sample Sheet "untitled" □ □						
			Sequencing Sa	mple Sheet		4 Dyes 单	
	*	Sample Name	DyeSet/Primer	Instrument File	Project Name	C 🔺	
	1		DT (BD Set Any-Prim	hstrument F	Þ		
	2		DT (BD Set Any-Prim	hstrument F 🕨	۱		
	3		DT (BD Set Any-Prim	hstrument F	F		
	4		DT (BD Set Any-Prim	hstrument F	٩		
	5		DT (BD Set Any-Prim	hstrument F	F		
	6		DT (BD Set Any-Prim	hstrument F	Þ		
	7		DT (BD Set Any-Prim	hstrument F	Þ		
	8		DT (BD Set Any-Prim	hstrument F			
	4	 In the upper-right corner of the Sample Sheet window, click the arrows next to the 4 Dyes setting. 					
		A pull-down menu ap	opears.				
	5	Select 5 Dyes.					
		5 Dyes 🜩					
		The setting changes	to 5 Dyes.				

Fill in the Sample To fill in the sample sheet:

Step	Action						
1	In the column Sample Name, enter the names of the samples:						
	Sequencing Sample Sheet 5 Dyes \$						
	Sample Name	DyeSet/Primer	File	Project Name			
		DT (BD Set Any-Prim	hstrument F	₹			
		DT (BD Set Any-Prim	hstrument F 🕨	₹			
		DT (BD Set Any-Prim	hstrument F	Þ			
2	Verify or change the DyeSet/Primer files according to the type of chemistry you are using.						
3	Verify the Instrument File setting, or change if necessary.						
	Note In 5 Dyes mode, you cannot go back and assign a different Instrument File to the gel file. However, you can change the Instrument File attached to sample files by using the Sample Manager.						
4	In the Project Name column, click the arrow icon.						
	A pull-down list of project names appears from which you can select the appropriate project name.						
	Note Project nar	nes are used only v	vith BioLIMS	software.			
5	In the Comments column, enter comments.						
6	Select File in the m	nenu bar, then seled	ct Save.				

Create and Fill in the	To crea	te and fi	ill in th	ne run sheet:				
Run Sheet	Step	Action	۱					
	1	Select File from the menu bar, then select New.						
		The Cr	reate N	l ew box appea	ars.			
	2	Click th	he Sec	Juence Run icc	on.			
		The Run window appears:						
						Run II Pause	Cancer	
		P	late Ch	eck Module Plate	e Check E	➡ PreRun Module Seq	PR 36E-2400 😫	
			Run	Module Seq Run	36E-2400 🗧	Collect time 3.5	5 hours	
				Lanes 96	•	Well-to-Read distar	nce 36 ≑ cm	
			Ru	n Mode 96 Lane	🛊	Operator		
			Sample	Sheet (<none></none>		<u>:</u> L		
			strume	nt File Instrume	ent File Ee	Sample File Name	Auto Auto I	
		N	lumber	Jampie	Name	Sample rite Name	Analyze Print	
		2						
		3						
		4						
		5						
							<u>→</u>	
	3	In the Lanes box, verify the correct configuration.						
		To make changes, click the arrows next to the Lanes box and select the correct						
	4	4 In the Run Mode box the correct run mode for the number of lanes						
	5	In the I	box ne	ox next to Sample Sheet , click the arrows.				
		From the pull-down list, select the newly created sample sheet for the 5 Dives run						
		Note When a 5 Dives sample sheet is selected the Dista Check Medule BreDur						
		Module	e and l	Run Module ar	re automatio	cally updated with 5 Dyes	s modules. If no	
		5 Dyes	s modu	ules were defir	ned in the p	preferences, then the mod	dules default to	
	6	Verify f	the Inc	trument File s	etting or ch	hande if necessary		
	•	Voliny			o	iange in nooodary.		

Example of Settings vary depending on the number of lanes, well-to-read distance, etc., but look similar to this: Window

□ Run-10/13/99 4.28 PM 🛛 🗉 🖻						
Plate Check PreRun Run Pause Cancel						
Plate Check Module Plate Check E5 💠 PreRun Module Seq PR 36E5-2400 ¢						
Run Module Seq Run 36E5-2400 🛊 🗋 Collect time 🛛 3.5 hours						
	Lanes 96 💠 Well-to-Read distance 36 🜩 cm					
	Ru	n Mode 96 Lane 보	Operator			
	Sample Sheet Sample Sheet-10/ 🗘 🗅					
	Instrume	nt File Instrument File Ee	•			
Lane	Sample Number	Sample Name	Sample File Name	Auto Analyze	Auto Print	
1	1	pGem forward	01•pGem forward			
2	2	pFS forward	02•pFS forward			
3	3	pFS reverse	03•pFS reverse			
4	4	PCR 1	04•PCR 1			
5	5	PCR 2	05•PCR 2			
6						

Analyze the Data When the run is finished, data is analyzed automatically or manually using the sequencing analysis software. For more information on the sequencing analysis software program and how to use it to analyze your data, please refer to the following publications:

- ABI PRISM DNA Sequencing Analysis Software User's Manual (P/N 4306158)
- ABI PRISM 377 DNA Sequencer User's Manual (P/N 4307164)

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