

AU480 Software Overview

Objectives



This document identifies AU480 common software menu components. It also contains a software chart and description of software screens.

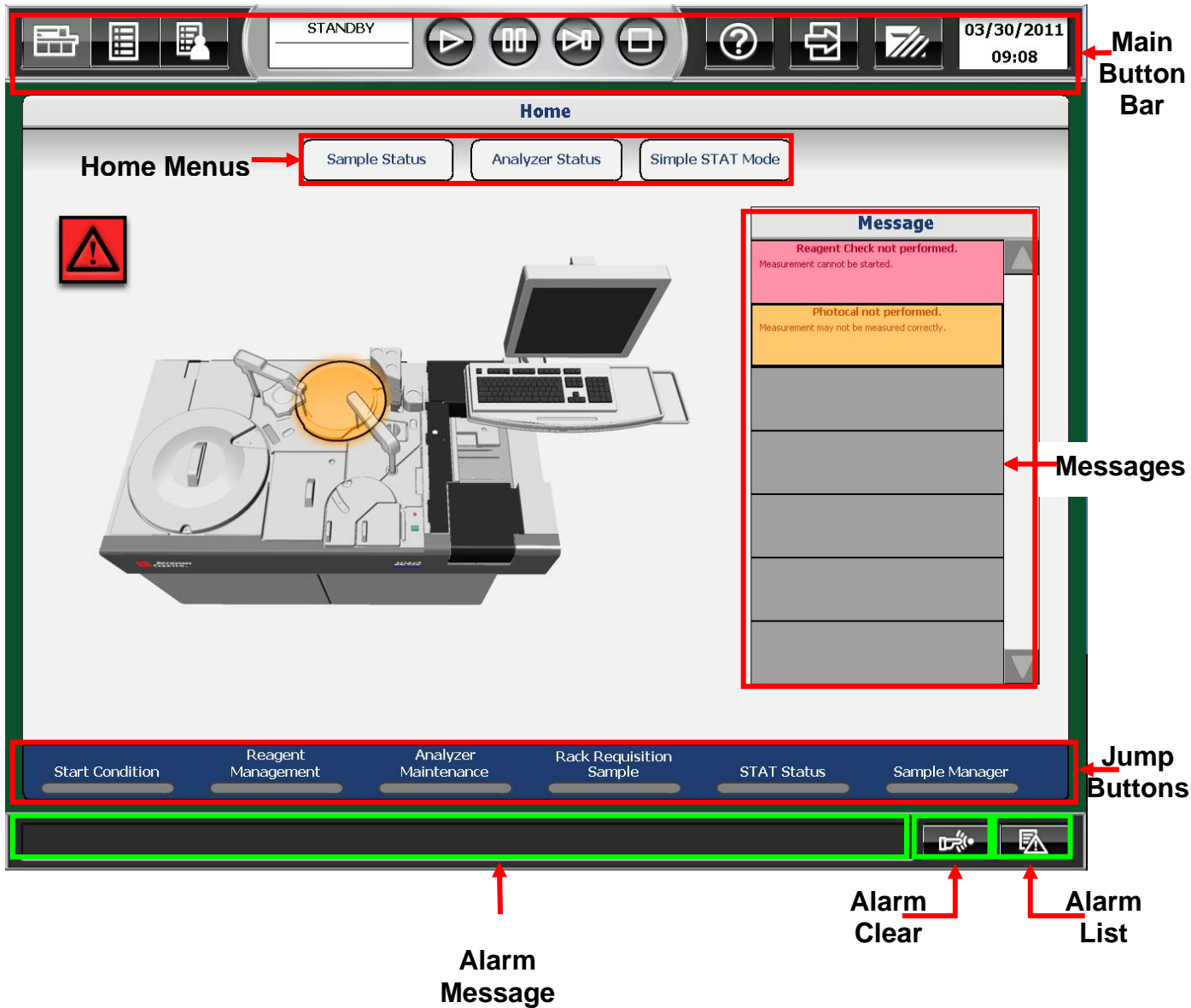
Software navigation and interaction is needed for successful operation of the instrument.

Reference














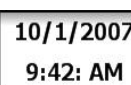
User's Guide
Software Chart (at the end of this document)

AU480 Home Menu




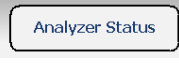

Common Screen Elements

Main Button Bar*

Button	Description
 Home	Select this button to display the Home screen
 Menu List	Select this button to display the Menu List screen
 User Menu	Select this button to display the User Menu List screen (configured by the user)
 Mode Display	Indicates the current mode of the system. Displays the time remaining for certain operations
 Measure Start	Select this button to start/restart analysis
 Pause	Select this button to pause sampling. Select Start to resume sampling.
 Feeder Stop	Select this button to stop the rack feeder
 Stop/ Standby	Select this button to stop analysis. All data in process will be lost. When the system is stopped, select this button again to return the system to standby mode
 Online Help	Select this button to access online operational help (available when the system is in Standby/Stopped)
 Log Out	Select this button to log out the user
 Shut Down / End Process	Select this button to shut down system operations and switch off the auxiliary power supply
 Current Date/Time	Displays the current date and time


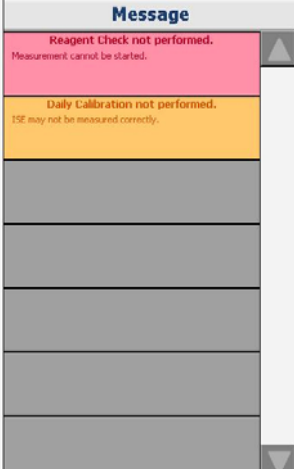
*The Main Button Bar is viewable from all software screens.

Home Menu

Menu	Description
	Sample Status: A real-time display that is used to monitor the status of samples during analysis.
	Analyzer Status: Used to display the analyzer status
	Simple STAT Analysis: Provides access to an alternate software option to use the STAT table





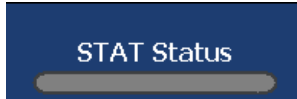

Messages

A message display area on the Home Menu alerts the operator of conditions that currently exist on the system.

Button	Description
 <p>Error Symbol</p>	Changes color or symbol according to the last message displayed.
 <p>Message Window</p>	<ul style="list-style-type: none"> Real Time Messages that provide information to the operator Displays in green, yellow, orange or red to indicate message severity <ul style="list-style-type: none"> Red messages require operator attention before system can process samples The user may select a message to highlight the affected component on instrument diagram



Jump Buttons

All of the software screens required for Daily Start Up and Daily Maintenance can be accessed using the “jump” buttons.

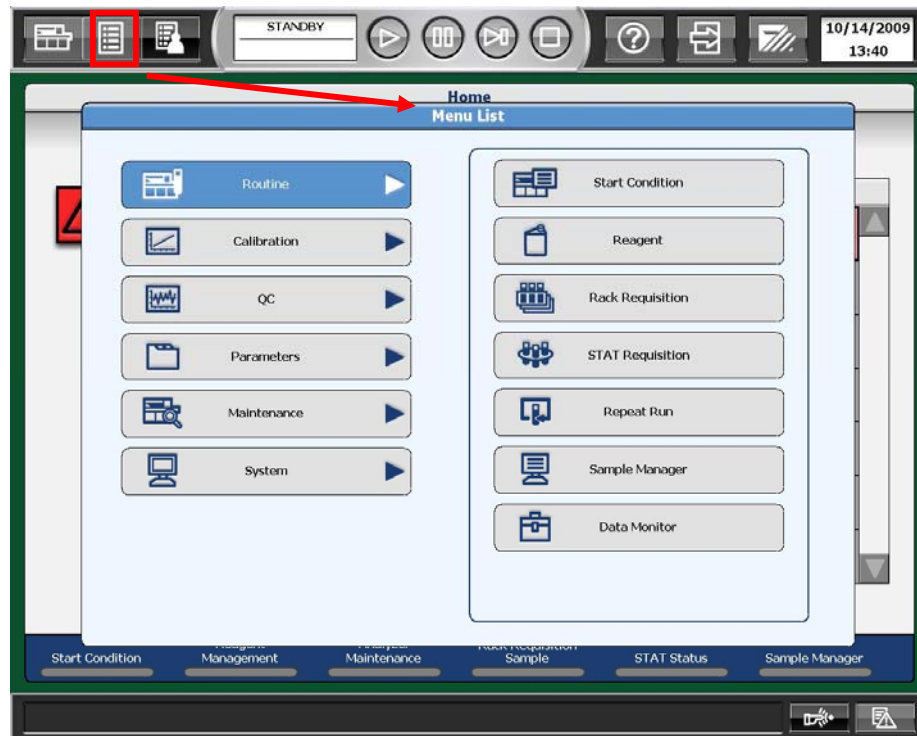
Button	Description
	Create a data index, which includes setting the index date and time, start sample number, group of tests and operator name.
	Check detailed reagent/calibration information, including the number of tests available in each on board reagent bottle.
	Access the maintenance menu and perform maintenance operations.
	Use to requisition calibrations, quality control or routine patient samples.
	View the Status of the STAT table and start STAT sample analysis.
	Display analysis results, perform data correction, print data lists and batch transfer data.

Alarm Displays

An alarm message display area displays at the bottom of most menus to alert the operator of any alarms that occur.

Button	Description
Alarm Message	Alarm message displays to the left of the Alarm Clear button.
	Alarm Clear Select once to silence an alarm, and a second time to clear the alarm displayed.
	Alarm List Select to display the alarm list.







AU480 Menu List



- The left column provides the user access to the software tree
- The right column displays sub-menus of the menu selected in the left column

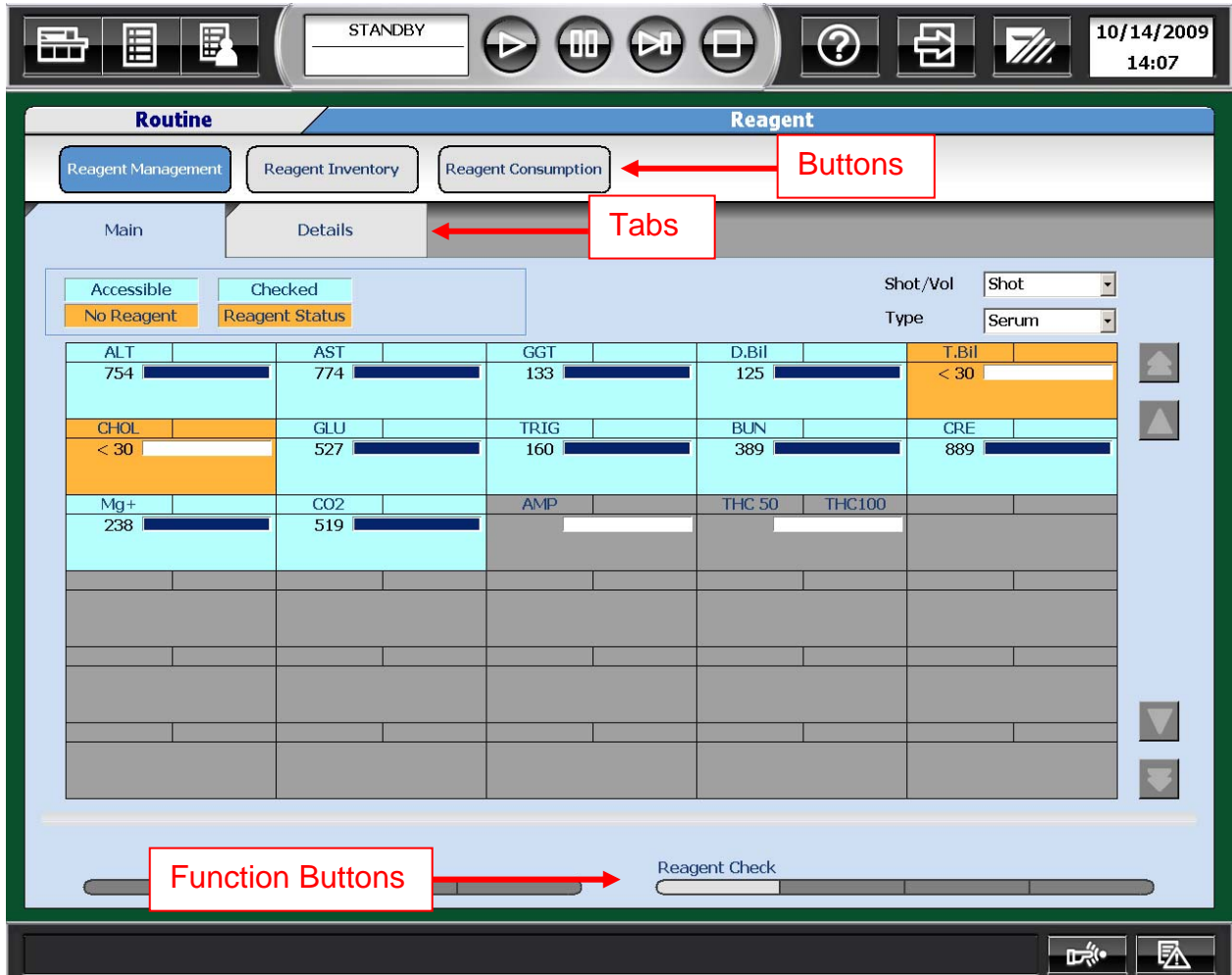
Menu Buttons

Menu Buttons are available from the Menu List screen to access the software tree. Select a Menu button to display sub-menus specific to the menu topic.

 Routine	Basic operation menus for performing tests. Includes setting start conditions, managing reagents, assigning racks, viewing status of samples, programming samples/calibrations/QC, repeating results, managing samples, and monitoring data.
 Calibration	Display and manage calibration results and histories
 Quality Control	Display and edit quality control (QC) results and histories
 Parameters	Set analysis parameters. Includes common and specific test parameters, repeat parameters, calibration and QC parameters
 Maintenance	Perform maintenance, view generated maintenance alarms, perform diagnostics
 System	Customize the system setup. Includes online communication setup, format reports, create comments, setup system conditions, create user menu, and external data management

Buttons/Tabs

- Buttons are available within a menu to select a sub-menu
- Tabs are available within a sub-menu to select a topic
- Function buttons are available at the bottom of some screens to perform functions specific to that screen



Buttons

Tabs

Function Buttons

Accessible		Checked		No Reagent		Reagent Status	
ALT	754	AST	774	GGT	133	D.Bil	125
CHOL	< 30	GLU	527	TRIG	160	BUN	389
Mg+	238	CO2	519	AMP		THC 50	THC100

Shot/Vol: Shot
Type: Serum

Reagent Check

Software Chart

- Utilize the chart to navigate all the software areas of the AU system. The Software Chart is located on the following pages and can also be found in the AU480 Quick Response Guide.

AU480 Software Chart

Main Menu

Routine

Start Condition

Reagent ►

- Reagent Management
- Reagent Inventory
- Reagent Consumption

Rack Requisition ►

- Sample
- Calibration
- QC

STAT Requisition ►

- STAT Status
- Sample
- Calibration
- QC

Repeat Run ►

- Repeat Order
- Repeat Data Verification

Sample Manager ►

- Sample
- RB/CAL/QC

Data Monitor ►

- Reaction Monitor
- Data Statistics
- Correlation Chart

Calibration

Calibration Monitor

Calibration Verification ►

- Calibration Verification
- Material Parameter

QC

QC Monitor ►

- Daily Chart
- Day to Day Chart
- Twin Plot Chart

QC Data Review

Parameters

Common Test Parameters ►

- Test Name
- Profile
- Group of Tests

Specific Test Parameters ►

- General
- LIH
- ISE
- HbA1c
- Calculated Tests
- Range

Repeat Parameters ►

- Repeat Common
- Repeat Specific

Calibration Parameters ►

- Calibrators
- Calibration Specific
- STAT Table Calibration

QC Parameters ►

- Controls
- QC Specific
- STAT Table QC

Misc

- Checked Tests
- Contamination Parameters
- Data Check Parameters

Maintenance

User Maintenance ►

- Analyzer Maintenance
- ISE Maintenance
- OSV
- Load Reagent
- Parameters

Alarm Log

Maker Maintenance ►

- Program Version
- Analyzer Diag
- ISE Diag

System

Online

Format ►

- Requisition Format
- List Format

Comment Masters

System Condition ►

- Analysis Mode
- Set Date and Time
- Auto Power On
- Password
- Login Condition

User Menu

External Data Management ►

- External Data
- Management
- File Management
- Offline Format

12.1 Home Menu

The “Home” window appears when the system starts up. The menus displayed on the “Home” window are referred to as “Home menus”. Users can advance to various menus from this window. The list of menus included in the “Home menu” is indicated below. Also, individual menu functions are summarized.






Home Menus

Menu	Submenu	Option
Home Menu	Sample Status A real-time display used to monitor the status of samples during analysis as well as their print status.	
	Analyzer Status Used to display the analyzer status.	
	Simple STAT mode Allows an untrained operator to run a sample using the STAT table.	





12.2 Permanently Displayed Button Configuration and Function

The multiple function buttons located at the upper and lower outside of the Home menus are always displayed whatever menu is selected.



Group of Function Selection Buttons

Button	Button name	Function
	Home	Displays the Home window.
	Menu List	Displays the menu list.
	User Menu	Displays the user menu list.




Group of System Control Buttons

Button	Button name	Function
	Start	Starts or restarts analysis.
	Pause	Temporarily stops sampling.
	Feeder Stop	Temporary stops the rack feeder during analysis.
	Stop/Standby	Transfers the system to the <i>Stop</i> mode and transfers from Stop back to Standby.

Group of Alarm Related Buttons

Button	Button name	Function
	Alarm List	Displays the alarm list.
	Alarm Clear	Button for silencing an alarm and clearing the alarm display field.

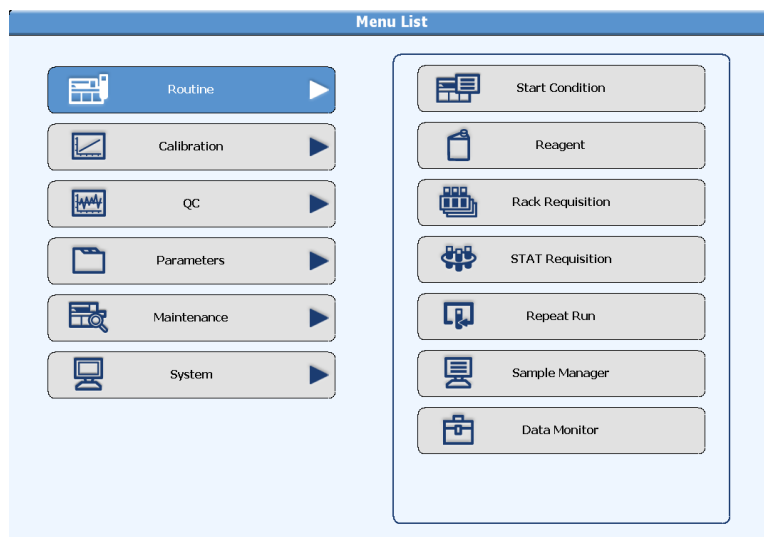
Group of Other Buttons

Button	Button name	Function
	Help	Displays the Help window.
	Logout	Facilitates operator login and logout.
	End	Shuts down the system.

12.3 Menu Buttons Overview

To perform parameter setup necessary for analysis, requisition concerning analysis, and check for analysis results after operation, select a menu from various menu buttons at the left side of the “Menu List” window.

The display contents of submenus displayed to the right vary depending on the selected menu.



12.4 Routine Menu

The “Routine menu” is a group of basic operation menus for performing test. Unless the basic setup is performed beforehand with the [Parameters] menu, some submenus cannot be used.

Menu	Submenu	Option
Routine	Start Condition Used to set the index date and time, start sample number, etc., before starting analysis.	
	Reagent	Reagent Management Used to check the quantity of reagent and the number of tests available in a bottle.
		Reagent Inventory Sets up the reference value for each day of the week to perform a daily check.
		Reagent Consumption Displays the number of shots consumed each day for each reagent.
	Rack Requisition	Sample Used to set the sample numbers and analysis items required for rack analysis.
		Calibration Used to set the requisitions for calibration for rack analysis.
		QC Used to set the requisitions for quality control analysis for rack analysis.
	STAT Requisition	STAT Status Use to view the status of the STAT table and start STAT sample analysis.
		Sample Performs requisition of patient samples to be analyzed on the STAT table.
		Calibration Performs requisition of calibrators to be analyzed on the STAT table.
		QC Performs requisition of QC samples to be analyzed on the STAT table.
	Repeat Run	Repeat Order Used to requisition repeat samples.
		Repeat Data Verification Used to view repeat results and perform overwriting of the data.

Menu	Submenu	Option
Routine	Sample Manger	Sample Used to display analysis results, perform data correction, print data list and batch transfer data online.
		RB/CAL/QC Used to print and batch transfer RB/ CAL/QC results online.
	Data Monitor	Reaction Monitor Displays information about reaction processes of analysis results.
		Data Statistics Displays key statistics of patient sample results and the results of a test within one index as bar charts.
		Correlation Chart Displays a correlation chart.

12.5 Calibration Menu

The “Calibration menu” is a group of menus for displaying and managing calibration results and histories.

Menu	Submenu	Option
Calibration	Calibration Monitor Displays calibration results as a graph or a data list.	
	Calibration Verification	Calibration Verification Verifies the calibration performance.
		Material Parameter Set Parameters for calibration verification.

12.6 QC Menu

The “QC menu” is a group of menus for displaying and editing quality control (QC) results and histories.

Menu	Submenu	Option
QC	QC Monitor	Daily Chart Display the QC data variation within the same or between index dates as a daily chart.
		Day to Day Chart Display the QC data variation within the same or between index dates as a day to day chart.
		Twin Plot Chart Display the QC data variation of two QC samples as a twin plot chart.
	QC Data Review	Used to edit QC result.

12.7 Parameter Menu

The “Parameters menu” is a group of menus for setting various parameters such as the analysis method. Be sure to set those parameters before using this system for the first time. To set the system own conditions, use the “[System](#) menu”.

Menu	Submenu	Options
Parameters	Common Test Parameters	Test Name Used for basic parameters such as test name and reagent ID.
		Profile Used to select specified test items for one profile. Multiple profile setting for samples, RB/ Calibration and QC is possible.
		Group of Tests Used to set the round name and test items for each round.
	Specific Test Parameters	General Used to set detailed parameters for general test items.
		LIH Used to set detailed parameters for the Lipemia/ Icterus/Hemolysis test.
		ISE Used to set detailed parameters for the ISE test.
		Calculated Tests Used to set detailed parameters for calculated tests.
		Range Used to set parameters for the reference range of each test.
	Repeat Parameters	Repeat Common Used to set the common parameters for a repeat run analysis.
		Repeat Specific Used to set the repeat and reflex decision ranges and the repeat dilution rate of repeat run analysis for individual test items.
	Calibration Parameters	Calibrators Used to set common calibrator parameters such as name, ID and Lot number.
		Calibration Specific Used to set specific calibration parameters for individual test items.
		STAT Table Calibration Used to set parameters for calibration analysis using the STAT Table.

Menu	Submenu	Options
Parameters	QC Parameters	Controls Used to set the common parameters for a quality control analysis.
		QC Specific Used to set the average value and standard deviation of the control sample for quality control of individual items.
		STAT Table QC Used to set parameters for QC analysis using the STAT Table.
	Misc.	Checked Tests Used to set parameters for logic checked tests.
		Contamination Parameters Used to set parameters for contamination of tests
		Data Check Parameters Used to set parameters for data check such as diagnosis of prozone. For detailed information, contact Beckman Coulter Sales or Technical Services.

12.8 Maintenance Menu

The “Maintenance menu” is a group of menus that are used for daily maintenance of the system. It allows the user to plan a maintenance schedule and check for a generated alarm.

Menu	Submenu	Options
Maintenance	User Maintenance	ANL Maintenance Used to display the maintenance schedule and provide instruction on maintenance procedures.
		ISE Maintenance Used to display the maintenance schedule of the ISE unit and provide instruction on ISE maintenance procedures.
		OSV Displays the connection status of the Beckman Coulter Support Vision (OSV) and transmits the AU480's various files.
	Alarm Log Chronologically lists the alarm that have accrued.	

12.9 System Menu

The “System menu” is a group of menus used for setting the print format, use/nonuse of barcode, optional conditions, etc.

Menu	Submenu	Options
System	Online Used to set the parameters for online communication between a host computer and the system.	
	Format	Requisition Format Used to enter the sample requisition parameters.
		List Format Used to set the common format parameters for printing the pending list, work list, repeat list and the data list.
	Comment Masters Used to customize the comments appended to the analysis results.	
	System Condition	Analysis mode Used to set the analysis mode, barcode definition, auto/standard repeat and so on.
		Set Date and Time Used to set the system date and time.
		Auto Power On Used to set the auto power on time for each day of the week.
		Password Used to set and change passwords
		Login Condition Used to set login information.
	User Menu Used to set a menu as a user menu.	
	External Data Management	External Data Management Saves the analysis data on an external storage device or media.
		File Management Used to save and up load parameter files on an external storage device or media.
		Offline Format Used to set the output format of results and save data in a delimited format for use in external applications (spreadsheets, etc).