

CLINITEK Advantus®

Analyzer

Siemens Healthcare Diagnostics Inc.

Software Version 3.11/3.10 Release Notes

Introduction

Siemens Healthcare Diagnostics is pleased to introduce a new version of the CLINITEK Advantus [®] analyzer software.

New Capabilities

Software version 3.11/3.10 introduces automatic checks (Auto-Checks) and the additional capabilities listed below:

- Adds the following automatic checks (Auto-Checks):
 - Identify Siemens strip type
 - Detect urine strip humidity overexposure
- Allows you to select any parameter from the Tests to Report and their Order screen.
- Modifies button labeling for the strip switch feature, and standardizes the terminology for primary and alternate strip throughout the software.
- Adds support for barcode entry of strip lot number and expiration date and QC lot and expiration date.
- Displays the strip lot and expiration date on the Ready screen.
- If the serial port is enabled, eliminates the Memory Full warning after 500 results.
- Adds the product name and analyzer serial number to the results printout.
- Corrects computer port settings on the analyzer setup report.
- Retains results after user changes the primary strip type.
- Improves calibration alignment.
- Reduces the occurrence of E20-2 errors.

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Supplemental Operating Instructions

Auto-Checks: Identify Siemens Strip Type

This software version automatically identifies the urine strip being tested.

Some Siemens urine strips have identification (ID) bands, which can be white or colored. When using these strips, the analyzer reads the band and automatically recognizes the strip type, eliminating the menu setup step when changing urine strip types. This automatic identification overrides the preset urine strip setting.

If you want to enter the strip lot number, you must still identify a primary and alternate strip type.

Note If you enable automatic color detection and use one of the following reagent strips for urinalysis, no result for color is reported:

- Multistix ®
- Multistix SG
- Uro-Hema-CombistixTM
- Uro-LabstixTM
- Hema-Combistix ® LONG

Auto-Checks: Detect Urine Strip Humidity Overexposure

Urine strips with ID bands and a leukocyte pad are checked to ensure quality.

After dipping and placing the strip in the analyzer, the analyzer checks to ensure that the urine strip was stored at the proper humidity prior to testing. If humidity overexposure is detected, the analyzer generates an error message and does not report test results.

Reporting Options

The Tests to Report and their Order screen now allows you to select any parameter to report. The analyzer reports the results associated with the strip used.

Enter Strip Lot and Expiration Information

You can enable or disable entry of strip lot information from the Setup screens. The default setting is Disabled.

Use this procedure to enable or disable strip lot information:

- 1. At the Ready/Run screen, select **Menu**.
- 2. Select Setup.

- 3. Select the Next button 6 times.
- 4. Use the cycle key to select Strip lot information ON or OFF.
- 5. Select the Return to Ready/Run key to save.

Use this procedure to enter strip lot and expiration information:

- 1. At the Ready/Run screen, select Menu.
- 2. Select Primary strip lot or Alternate strip lot.

A numeric keypad displays.

- 3. Enter a strip lot of up to 6 digits:
 - a. Select A-Z to enter alphabetic characters.
 - b. Select **Enter** to return to the numeric keypad.

You can also enter the lot from a computer keyboard, or scan it from a barcoded label using the handheld barcode reader. If you scan a combined lot and expiration barcode, the analyzer enters the expiration date at the same time as the strip lot ID.

c. Select Enter to save the strip lot .

A numeric keypad displays.

- 4. Enter the expiration year in the format YYYY.
- 5. Enter the expiration month in the format MM.

Select **Enter** to save the expiration date.

You can also enter the date from a computer keyboard, or scan it from a barcoded label using the handheld barcode reader.

Enter QC Lot and Expiration Information

You can enter QC lot and expiration information from a computer keyboard, or scan it from a barcoded label using the handheld barcode reader.

Note The analyzer requires entry of QC lot information.

Use this procedure to enable or disable QC expiration date:

- 1. At the Ready/Run screen, select Menu.
- 2. Select Setup.
- 3. Select the Next button 5 times.
- 4. Select Set QC Options.
- 5. Use the cycle key to select QC expiration date ON or OFF.
- 6. Select the Return to Ready/Run key to save.

Use this procedure to enter QC lot and expiration information:

- 1. At the Ready/Run screen, select Menu.
- 2. Select QC.

A numeric keypad displays.

- 3. Enter a QC lot ID number of up to 13 digits:
 - a. Select A-Z to enter alphabetic characters.
 - Select Enter to return to the numeric keypad.
 You can also enter the QC lot ID from a computer keyboard, or scan it from a barcoded label using the handheld barcode reader.
 - c. Select Enter to save the QC lot ID.

A numeric keypad displays.

- 4. Enter the expiration year in the format YYYY.
- 5. Enter the expiration month in the format MM.
- 6. You can also enter the date from a computer keyboard, or scan it from a barcoded label using the handheld barcode reader. Select **Enter** to save the expiration date.

Choose Strip Button Label

The label to select the alternate strip at the start of each run now reads Choose Strip rather than the alternate strip name.

Select a Urine Strip

Use this procedure to select a primary and alternate urine strip.

Note This procedure is not required if you are using strips with an ID band.

Check that the primary and alternate urine strip correspond to the strip types you are using.

Do not use a urine strip other than the selected primary or alternate urine strip, or a Siemens strip with an ID band. Only use Siemens brand urine strips. Use of other strips may cause erroneous results.

- 1. If required, select the cycle key next to Choose Strip to use the alternate strip.
- 2. If the primary and alternate strip types selected for your analyzer do not correspond to the strip types you are using, change the selected strips before beginning testing.
- 3. Select the new strip types through the setup routine.

See Section 8, System Configuration, Setup Information in your CLINITEK Advantus Operator' s Guide for more information.

Error Code Information

Below are descriptions of additional error codes, not described in the operator's guide, to aid troubleshooting. Included in the error descriptions are causes and corrective actions. If you have questions, contact your local technical support provider.

Error 20-2. Strip type mismatch

Cause	Corrective Action
The system does not recognize the strip type. Improper dipping technique may generate this error. Note Extremely dark colored or highly positive samples or controls may also generate this error.	 Retest the sample using a strip listed in the <i>CLINITEK Advantus</i> <i>Operator's Guide</i>. Use proper dipping technique, as described in the operator 's guide.

Cause	Corrective Action
 The Laboratory Information System (LIS) is attempting to send a load list to the analyzer that does not match the format outlined in the <i>CLINITEK Advantus and</i> <i>CLINITEK 500 Analyzers</i> <i>Interface Specification</i>. Causes for this error include: The load list contains an invalid character. Use an ASCII code range 0032 to 0126 excepting these characters: &\^ The load list contains more than 200 records. The load list contains less than 1 record. A Patient ID in the load list contains only space characters. A Patient ID in the load list contains more than 13 characters. 	 Make sure the load list complies with the format outlined in the <i>CLINITEK Advantus and CLINITEK 500</i> <i>Analyzers Interface Specification</i>. Resend the load list.

Error 40. Incorrect format of computer load list

Error 40-2. Strip quality check failure

Cause	Corrective Action
The strip was exposed to	Retest the sample using a new strip.
excessive humidity.	If the issue is not resolved, open a new
Note Extremely dark colored or highly positive samples or controls may also generate this error.	bottle of strips.

Error 41. Cannot download load list

Cause	Со	rrective Action
The LIS or HIS is attempting to download a load list to the analyzer and the analyzer is not at the Ready/Run screen.	•	Return the analyzer to the Ready/Run screen. Resend the load list.

Error 42/43. Printer Queue warnings

Cause	Corrective Action
The analyzer's print memory is almost full.	
Error 42 displays when using an internal printer.	 Error 42: Ensure the printer is set to ON Ensure the internal printer has paper Check the printer flex cable connection
Error 43 displays when using an external printer.	 Error 43: Ensure the printer power is on Ensure the printer has paper Ensure cable connections are secure Replace the printer or connect to a different printer If the issue cannot be resolved, contact your local technical service representative.

Error 44/45. LIS Queue warnings

Cause	Corrective Action
The analyzer's LIS transfer memory is almost full.	• Ensure the host PC or LIS/HIS power is on
Error 44 displays when the analyzer is connected to an LIS with a serial port.	Ensure cable connections are secure
Error 45 displays when the analyzer is connected to an LIS through an Ethernet port.	

Cause	Corrective Action
The analyzer's print memory is full. Error 46/47 only display after E42/43 errors are reported and not resolved. Testing cannot continue until you print the results.	
Error 46 displays when using an internal printer.	 Error 46: Ensure the printer is set to ON Ensure the internal printer has paper Check the printer flex cable connection
Error 47 displays when using an external printer.	 Error 47: Ensure the printer power is on Ensure the printer has paper Ensure cable connections are secure Replace the printer or connect to a different printer
	If the issue cannot be resolved, contact your local technical service representative.

Error 46/47. Printer Queue warnings

Error 48/49. LIS Queue warnings

Cause	Corrective Action
The analyzer's LIS transfer memory is almost full. These errors will only be displayed after E44/45 errors are reported and not resolved. With Errors 48/49, patient testing cannot continue until you download the results. Error 48 displays when the analyzer uses a serial port. Error 49 displays when using an Ethernet port.	 Ensure the host PC or LIS/HIS power is on Ensure cable connections are secure If the issue cannot be resolved, contact your local technical service representative.

Error 50-2. Strip type mismatch

Cause	Corrective Action
The strip being tested may not be a Siemens brand strip.	• Retest the sample using a Siemens brand urine strip listed in the
Improper dipping technique may generate this error. Note Extremely dark colored or highly positive samples or controls may also generate this error.	 CLINITEK Advantus Operator's Guide. Use proper dipping technique, as described in the operator's guide.

Error 53/54. Instrument memory warnings

Cause	Corrective Action
The analyzer's memory has reached the maximum storage of 200 quality control results or 500 patient results, and the LIS or printer is not available. Testing cannot continue until you transfer or delete the results.	 Ensure the host PC or LIS/HIS power is on Ensure cable connections are secure If the issue cannot be resolved, contact your local technical service representative.
Error 53 displays when the analyzer's quality control memory is full.	
Error 54 displays when the analyzer's patient memory is full.	

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