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Prepared by QA Committee		
Issued by: Laboratory Manager	Revision Date:9/12/2022	
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VITEK MANUAL

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Vitek 2 version 9.02 System Overview:

Vitek 2 is now divided into 3 subsystems which can be found on your PC desktop.

1. FLEXprep
 - a. For programming and loading isolates onto the Vitek instrument
2. Vitek 2 Web
 - a. For reviewing results and editing isolate data
3. Vitek 2 Systems
 - a. For detailed configuration and utility setup



The main navigational areas of the Vitek 2 Web system include:

1. Worklist
2. Cassette View
3. Patient View
4. Tools
5. Full screen
6. Help

To begin if the system has been logged out:



Press Ctrl-Alt-Delete.

To log into windows:

Enter Username: labsuper
Enter Password: Lab_Super

To log into the Vitek 2 system:

Find FLEXprep or Vitek 2 Web or Vitek 2 Systems on desktop
Enter Username: labsuper
Enter Password: Lab_Super

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Set Up of Vitek2 Cards:

Before each daily use, check Densichek or DensiCHEKplus with the appropriate standards.

For Densichek Model:

Densichek: reading within +/- 0.1 of the value printed on the Biomerieux standard tube.

Once monthly or as needed if McFarland standard reads out of range:

1. Press the adjustment button on the right side of the Densichek and insert the Calibration Standard tube and release the button.
2. Turn the standard one full rotation within the specified two second time interval.
3. The reading should be within +/- 0.1 of the value printed on the Calibration Standard tube.
4. If calibration fails, the reader cannot be used and must be returned to Biomerieux for repair.

For Densicheck Plus Model:

DO NOT VORTEX DensiCHEKplus standards, invert tube to re-suspend.

DensiCHEKplus glass setting: zeroed to 0.00 McF standard, 0.5 McF standard within range of 0.44 to 0.56.

Occasionally the instrument may freeze. To reboot, remove then replace the batteries.

NOTE: it is important to rotate the tubes during reading.

Press the POWER button.



1. Press the MENU button.
2. Press the green READ button to move the upper flashing triangle to “GLASS”.
3. Press the MENU button to save the setting.
4. To set the “blank” value, insert and turn the DensiCHEKplus Standards kit 0.0 McF standard one full rotation. If the reading does not occur, press the READ button to initiate reading and again turn the 0.0 McF standard one full rotation during reading. If the reading is not zero, press the “ZERO” key and rotate the 0.0 McF standard again during reading.

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5. Remove and reinsert the DensiCHEKplus Standards kit 0.0 McF, turning the tube one full rotation to check that it is zeroed correctly.
6. To set your 0.5 McFarland value, clean the 0.5 McFarland standard and invert 6 times to re-suspend. Insert and turn the 0.5 McFarland standard one full rotation. If the reading does not occur, press the READ button to initiate reading and again turn the 0.5 McFarland standard one full rotation during reading. Acceptable reading range for the 0.5 McFarland standard is 0.44 to 0.56.
7. If calibration fails, the reader cannot be used and must be returned to Biorerieux for repair.

Set zero reading for plastic tubes

1. Press the MENU button.
2. Press the READ button to move the upper flashing triangle to PLASTIC.
3. Press the MENU button to save the setting.
4. Insert and turn the blank plastic saline tube one full rotation. If the reading does not occur, press the READ button to initiate reading and again rotate the blank saline tube during reading. If the reading is not zero, press the “ZERO” key and rotate the blank saline tube again during reading.
5. If calibration fails, the reader cannot be used and must be returned to Biorerieux for repair.

McFarland Dilution of Organism:

For Gram negative bacilli, Staphylococcus species and Enterococcus species adjust McFarland turbidity to 0.5 to 0.63(± 0.1). For Haemophilus species, Neisseria species and Eikenella species adjust turbidity to 2.7 to 3.3 (± 0.1).

Set DENSICHEK PLUS to plastic tube setting for isolate suspensions



1. Use fresh 18 hour culture of organism.
2. Subculture frozen or freeze dried isolates twice before setting up any Vitek 2 cards.
3. Place a small barcode label near the top of a 3ml Vitek saline tube.
4. Inoculate organism into 3ml Vitek Saline tube, vortex and invert the tube 2 to 3 times to uniformly suspend inoculum.
 - IMPORTANT – cap tubes with lids during vortexing
5. Using the Densicheck or DensiCHEKplus, insert and turn the tube one full rotation.
6. For heavy suspensions use additional saline from Vitek tubes to dilute.
7. Cards must be filled within 15 minutes of inoculum preparation.

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8. Card types include Identification and Antimicrobial Susceptibility Testing (AST).

Programming on FLEXprep



The screenshot displays the VITEK2 software interface. On the left, a 'Summary' table lists cassette slots and their details:

Slot #	QC	Accession ID	Card	Organism
1		1234-1	---	
2		1234-1	AST-GP67	
3		12345-1	---	
4		12345-1	AST-P580	Staphylococcus aureus
5		12345-2	---	
6		12345-2	AST-N391	Escherichia coli
7		12345-3	GN	
8				
9				
10				

The central area shows a 'Patient: training, training' and 'Card Type: AST-N391' with 'Organism: Escherichia coli'. Below this is a diagram of a cassette with two slots, 5 and 6, each containing a card with a barcode and the text 'AST-N391 ...2837'. The cassette ID is shown as '12345-2' and '12345-2'. On the right, there are several function buttons: F6 (New Cassette), F8 (Add Card), F12 (Validate), F9 (Summary), and F10 (Send Cassette).

Useful keys:

- F6** New cassette
- F9** Alternate through screens for editing/reviewing cassette
- F10** Send cassette information to Vitek 2 systems



1. Locate FLEXprep on desktop.
2. Login using
 - username: labsuper
 - Password: Lab_Super
3. Under "Cassette ID" scan or enter cassette ID
 - a. If message "cassette ID is not unique" pops up on the screen, this means the cassette has been used that day. The unique ID of the cassette will ensure no other tech is using the same ID simultaneously.
 - b. Click OK to delete all information previously on cassette.
4. For ID cards only, use only the inoculum tube.
 1. Place the inoculum tube into the cassette.
 2. Use the barcode reader to scan the order number. The isolate number defaults to "1". To change the isolate number type in the new isolate number and press the enter key.

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3. Scan the Vitek ID card barcode and insert the blue tube portion (hockey stick) of the Vitek card into the inoculum. Always check the left side summary screen (highlighted in yellow) to check current positions.
 4. If you have additional cards to set up, press F12 (validate) to move to the next position. Otherwise, press F9 to review the cassette information. Carefully check that the LIS order number, isolate number, card type and carrier position match the F9 summary screen. Press F9 again if you need to return to the cassette to add or alter any data.
 - a. Note: to toggle between slot numbers on the cassette, use the ← and → arrows highlighted in yellow.
 - b. To edit isolate date after you have verified it (F12) you must click “delete card” on the right hand side and rescan the isolate and card information.
 5. After ensuring all information on summary screen is correct and matches your carrier, press F10 to send cassette information to Vitek 2 instrument.
 - a. A popup will say “All cassette data will be sent to this instrument, do you want to send cassette?” Click OK.
 - b. A popup should come up immediately that reads “Cassette data sent successfully” Click OK.
5. For ID cards mated with susceptibility cards, use the inoculum tube and an empty 12x75mm tube.
1. For ID with susceptibility cards, place the inoculum tube followed by an empty tube into the cassette.
 2. Use the barcode reader to scan the order number. Change the isolate number if needed, as above.
 3. Scan the Vitek ID card barcode and insert the blue tube portion (hockey stick) of the Vitek card into the inoculum. Press F8/Add Card to add susceptibility card.
 4. Scan the susceptibility card barcode and place the gray tube portion (hockey stick) of the Vitek card into the empty tube.
 5. Always check the left side summary screen (highlighted in yellow) to check current positions.
 6. If you have additional cards to set up, press F12 (validate) to move to the next position. Otherwise, press F9 to review the cassette

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information. Carefully check that the LIS order number, isolate number, card type and carrier position match the F9 summary screen. Press F9 again if you need to return to the cassette to add or alter any data.

- c. Note: to toggle between slot numbers on the cassette, use the ← and → arrows highlighted in yellow.
 - d. To edit isolate date after you have verified it (F12) you must click on the card for the isolate you wish to change and select “delete card” on the right hand side and rescan the isolate and card information. (the isolate number will automatically increase by one every time you scan the isolate number unless you refresh the screen, manually change back to the correct isolate number)
6. After ensuring all information on summary screen is correct and matches your carrier, press F10 to send cassette information to Vitek 2 instrument.
- a. A popup will say “All cassette data will be sent to this instrument, do you want to send cassette?” Click OK.
 - b. A popup should come up immediately that reads “Cassette data sent successfully” Click OK.
6. For susceptibility cards only, use the inoculum tube and an empty 12x75mm tube.
1. Place the inoculum tube followed by an empty tube into the cassette.
 2. Use the barcode reader to scan the order number. Change the isolate number if needed, as above.
 3. Scan the susceptibility card barcode. FLEXprep will automatically assign the susceptibility card to the empty tube position following the inoculum tube. Place the gray tube portion (hockey stick) of the Vitek card into the empty tube.
 4. A VitekMS identification will link to the susceptibility card through the Myla interface.
 - a. NOTE: If there is no VitekMS identification, you must enter an identification in the “Organism” field on FLEXprep. Either type in the organism name or use ∨∧ arrows to find organism ID.

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4. **Check that the cassette is properly seated, all caps are off the tubes, Vitek card hockey sticks are inside the suspension and susceptibility tubes and all cards are even.**
5. After loading the cassette, wait for the happy sound. If you do not hear the happy sound, the cassette will return to the loading dock where it will remain for **10 minutes only**. If no action is taken within 10 minutes, the cassette will be processed. Cards with load errors will **NOT** be processed and will return to the loading dock. Remove the cassette, correct errors and return to the Vitek2 loading dock.

Batch loading cassettes into the Vitek 2 system:

If three or four cassettes are ready to load at the same time, you may select Batch loading.

1. Check to be sure tips, saline and ID/Sens slots are enough for all cards in the batch.
2. Access the Batch Load function on the main menu.
3. If three or four boats are available, the screen will ask you to choose 3 or 4 cassettes to load.
4. The screen will indicate Load cassette number 1, etc. Follow the onscreen instructions.
5. The boats will be accepted one by one and then transported through bar coding, filling and reading one by one.
6. Be sure to listen for the happy sounds for each cassette, before leaving the instrument. If you do not hear the happy sound, the cassette will return to the Cassette loading Station. Remove the cassette and place it back on the Smart Carrier station. Correct errors and return to the Vitek2 loading dock.

Unloading Vitek Cassettes from Vitek 2 system

1. Flashing green light at loading door signals a cassette is ready for unloading
2. Open the loading door
3. Remove cassette
4. For each isolate, use the “straw” from AST dilution tube to inoculate a purity plate

Reviewing cassette after unloading on Vitek



It is imperative that all isolate information is logged on FLEXprep and sent (F10) to Vitek instrument.

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The Vitek will NOT alarm if there is no isolate information available, it will continue to perform testing based on the cards on the cassette (ID/AST).

Cassette view is a list of every cassette loaded onto the Vitek instrument. You can filter through the list by cassette status/ load date/ Vitek #

To ensure your cassette information was sent to Vitek successfully:

1. Click on Vitek 2 Web on your desktop
2. Click “Cassette View” on toolbar
3. Click Funnel icon to remove all filters
4. Click Cassette Status and filter by incomplete
 - a. Any cassette loaded on Vitek instrument with missing or incomplete information will show up here, you must correct the data before discarding the tubes on your cassette
5. Select your isolate and click edit (find your isolate and select edit next to cassette and select accession ID)
6. You can now enter accession ID/organism ID/ isolate # etc.
7. Click OK
 - a. Isolate should no longer be under “incomplete”

Note: If you notice incomplete cards after you have thrown out tubes in your cassette then you must delete/eject those cards and prepare your tubes again.

- Check your worklists often in SOFT LIS to see what work is pending

Vitek 2 Maintenance:

1. Daily instrument maintenance
2. Daily review
3. Daily DensiCHEK calibration
4. Monthly DensiCHEK cleaning
5. Monthly maintenance
6. Pipette/Saline replacement
 - a. Dispenser/pipetter diagnostic test

Daily instrument maintenance:


1. Remove the waste tray and discard the cards. Replace waste tray carefully to ensure it is properly seated.
2. At the instrument, press the “Menu” button, followed by “Display instrument QC status” button.
3. Note section A and B temperatures and the optical system status and record in the LIS Vitek QC.

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4. Press the “Menu” button twice to return to the main screen.

Daily review



Review cards setup on previous workday to identify incomplete cards/ missing data/ terminated cards.

1. From the toolbar, select WORKLIST.
2. Click “Clear all filters” (Large Funnel Icon)
3. Test date → change to yesterday’s date → Click “apply filter”
4. Isolate status → select “qualified” → Click “apply filter”



An orange and red square indicates missing data:

1. No patient name:
 - Check the LIS: if there is no isolate number, add it now. The download should be automatic. If there already is an isolate number or if there was no automatic download after you have added the isolate number, you will need to do a manual download (see below).
2. No organism identification/low discrimination:
 - Print out reports.
3. No accession number/isolate number/patient information
 - If there is no patient identifier associated with a card then delete the isolate as identity can no longer be confirmed. Technologists will have to check their pending work to see which isolate is missing information.
4. Terminated antibiotics
 - Click Card Status → Select “Terminated” → Apply filter
 - Print out reports

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Note: as the orders are corrected they will disappear from this work list

To print data/preliminary worklist:

1. Select data you would like to print using check boxes on left hand side of worklist or click “select all”
2. Click printer icon → Select “lab report” → Click printer icon again

Note: Reviewed order results remain in the active session for a set number of days before they automatically transfer to long term storage. Once an order is in long term storage the results may not be re-interpreted.

Daily DensiCHEK PLUS calibration



Performed by individual benches; each densicheck PLUS’s calibration must be checked each morning before use and recorded in the LIS QC program.

Each standard must fall within their defined acceptable range.

Standard	Acceptable Range	
0.5 McF	0.44	0.56
2.0 McF	1.85	2.15
3.0 McF	2.79	3.21

NOTES:

- The densicheck PLUS **MUST** be set to glass or plastic according to the tube Being used.
- Mix standards well by inversion
- When reading or blanking, always slowly rotate the tube one full rotation while The instrument displays a series of dashes. This will help to reduce the variation in readings due to irregularities in the tubes.
- When making suspensions, periodically recheck a blank plastic tube to verify zero is set correctly.
- See [Densicheck PLUS diagram](#) below for an explanation of display and keypad functions

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Densicheck PLUS Model:

Introduction

DensiCHEK™ Plus

Display and Keypad Functions

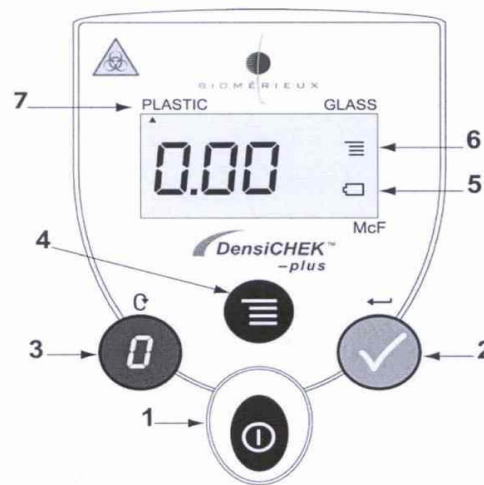


Figure 1-3: DensiCHEK™ Plus Display

- 1 – Power Key
- 2 – Read/Enter Key. Allows the user to manually initiate a reading. In menu mode, selects a menu option.
- 3 – Zero/ Scroll Key. In measurement mode, sets the instrument to zero. In menu mode, scrolls through menu options. Also scrolls when entering or editing the time.
- 4 – Menu Key. Enter/Exit the menu mode.
- 5 – Battery Low Indicator. Displayed when 10% battery life remaining for alkaline and 2% for NiMH is remaining. When flashing, the batteries are too low to complete measurements.
- 6 – Menu Indicator. Displayed when in Menu Mode.
- 7 – Tube Type Setting. Indicates one of two tube type settings. The instrument default is set to Plastic. If the left triangle is displayed, the PLASTIC tube setting is being used. If the right triangle is displayed, the GLASS tube setting is being used.

Monthly DensiCHEK PLUS cleaning

Each densicheck PLUS must be cleaned monthly.



1. Fill a small container with 3-25% hydrogen peroxide solution to fit a Densicheck test tube adaptor

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2. Working with one Densichek at a time:
 - i. Remove test tube adaptor
 - ii. Fully immerse in hydrogen peroxide followed by plain water
 - iii. Leave on lint free cloth to air dry completely
 - iv. Use a swab with 3-25% hydrogen peroxide to clean reading chamber
 - v. Clean circular windows on opposite sides of reading chambers with lens paper

3. Document cleaning in the LIS QC Program for each Densichek

Monthly Maintenance



1. MAX available slots must be 120; available ID slots must be 60.
2. Remove memory chips from trays (carriers)
3. Remove boats through menu (main menu, utilities, maintenance, cleaning)
4. Remove carousels for reader A, then reader B through menu (main menu, utilities, maintenance, cleaning)
5. Remove vitek discard card holders
6. Shutdown power through menu (main menu, utilities, maintenance, shutdown), pull out plug
7. If there is any visible contamination soak in 10% bleach solution for at least 5 minutes and then rinse with warm water
8. Wash all removed parts with soapy water and then rinse with warm water, mark trays with a "W" (washed), put all in O2 incubator to dry OR, if available, run through dishwasher and make sure dry
9. Dampen green cloth with 70% alcohol, clean inside surfaces and bottom of vacuum chamber (orange rubber)
 - Located inside left side of Vitek elevated towards back (look up)
10. Check overflow chamber and clean if necessary (open front panel at bottom of Vitek)
11. Clean arrays: (compressed air follow by alcohol wipe, dry with kimwipe)
12. Clean 6 sensors (compressed air only)
 - 2 top of B at sides
 - 1 each at bottom of carousel rotator
 - 1 each at top of rotator
13. Put plug back into instrument and turn on.
14. Allow parts to dry
15. Replace carousels in A, then B following the menu screen prompts

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- Replace carousel by angling it so the slanted notch at the small end slips beneath the black prong and the 2 cylindrical posts on the mounting side of the carousel fit into the carousel wheel.
Ensure biohazard symbol is facing out (towards you) when replacing
 - If an error occurs when replacing the incubator cover, turn system off through menu, ensure cover is properly aligned, then turn system back on.
16. Replace boats through menu:
Ensure arrow on boats is point towards the back of the Vitek (away from you)
17. Replace memory chips in trays.

Changing pipette tips and saline:

Pipetter/Diluter Accessory Kit (tips and tubing) and 0.45% saline bag.

Detailed procedures for changing VT2 tips and saline can be found in the VT2 Instrument Manual. (Section 7.3 to 7.9) After changing the tips and saline, a Dispenser/Pipetter diagnostic Test must be performed (**not** the Dispenser/Pipetter **Volumetric** Test), following the detailed procedures in the VT2 Instrument Manual. (Section 8.19 to 8.20).

A warning alarm will sound when the instrument tip and/or saline count drops below 40 indicating low stock. Do not change the tips and saline until approximately 10 to 15 tips are left. If there are an insufficient quantity of tips and/or saline, the cassette will not be processed and will return to the Vitek2 loading dock. Load the cassette in the other instrument.

If there are cards in the transport system, you will have to wait until they have been finished before you can change the tips and saline.

Change the tips and saline as follows:

Enter the lot number and expiry dates of the saline and Pipetter/Diluter Accessory kit in the Vitek QC program.

At the Vitek2 instrument screen press:

“Menu”, “Utilities”, “Maintenance”, “change pipette tips”.



At the prompt “About to change pipette tips. Do you wish to continue?” Choose “Yes” or, to stop, choose “No”.

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If you choose “Yes”, the Vitek2 screen will show “Proceed with pipette tip change”.

Use aseptic technique (wear gloves) to avoid contamination and fingerprints on the saline dispensing tube.

1. Tip the Vitek2 pipette holder upward, then lift up and remove it.
2. Discard remaining tips.
3. To open the pipette tip container, hold the front and back together (to avoid it springing open), then lift up the top flap.
4. Invert the Vitek2 tip holder upside down over the tip container and flip both over, allowing the tips to fall into the Vitek2 tip holder.
5. If the tips are not even, tap the holder gently on the side with your hand or use a sterile loop to even the tips.
6. Reseat the Vitek2 tip holder and tip it back into place.
7. Press “Done”.
8. On the Vitek2 screen you will see “Performing Pipetter self-check”.

If more detailed instructions are needed, refer to the Vitek2 online manual and/or the Vitek2 Instrument User’s Manual.

At the Vitek2 instrument screen press: “change saline”.

At the prompt “About to change saline. Do you wish to continue?” Choose “Yes” or, to stop, choose “No”. If you choose “Yes”, the Vitek2 screen will show “Proceed with saline change”.



1. Move the dispenser tube locking mechanism backward and remove the used dispenser tube, filter lines and saline bag.
2. Unwrap and place the saline bag onto the Vitek2 platform.
3. Using the replacement tubing and dispenser tube from the Pipetter/Diluter Accessory kit, move the dispenser tube locking mechanism backward and aseptically insert the new dispenser tube making sure it is properly seated..
4. Release the locking mechanism.
5. Replace the filter.
6. Remove the covers from the remaining tubing and saline bag, and insert the tubing tip into the saline bag. Make sure tubing is not be twisted.
Be carefully not to drop the tip covers into the instrument.

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7. Press the primer button to fill the tubing and the dispensing tube to the upper shoulder.
8. Lift the saline bag and hold it below the level of the primer button. Press the primer button slightly to lower the saline level to the lower shoulder of the dispenser tube.
9. Use a Kimwipe to gently clean the dispenser tube. Press “Done”. The instrument will “Perform a dispenser self-check” and return to the maintenance menu, if successful.

If more detailed instructions are needed, refer to the Vitek2 online manual and/or the Vitek2 Instrument User’s Manual.

Dispenser/pipettor diagnostic test

Perform every time the saline and tips are replaced.

Place 3 mls. Saline in cassette slots 1 and 3, and empty tubes in slots 2, 4 and 5 in a cassette. Smart carrier station entry is not required.

At the Vitek2 instrument screen press:

“Menu”, “Utilities”, “Diagnostics”, “Diagnostics/Pipettor”.

At the prompt “About to perform dispense pipettor test... Do you wish to continue?” Choose “Yes” or, to stop, choose “No”.

If you choose “Yes”. The Vitek2 screen will show “Load test cassette now”.

The dispenser/pipettor diagnostic test is a visual test as well as an electronic test. While the instrument is performing this test, you must open the front left door of the instrument and visually check the saline dispenser for any of the abnormal conditions listed below:

IMPORTANT: Ensure there is no sunlight shining directly on the saline dispenser.



1. Look for repeated back and forth movement while the saline dispense is in the upright position. The saline dispenser should move smoothly up and down when filling each empty tube (positions 2, 4 and 5).
2. Look for saline remaining in the saline dispenser tube when it returns to the upright position.

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3. Look for a saline stream and/or drops released from the saline dispenser tube when it is filling with saline.
4. Look for a saline stream and/or drops released from the saline dispenser tube as it returns to the upright position.
5. Look for lower volumes of saline while saline is being dispensed, comparing tubes 2, 4 and 5 to each other. (Tubes 1 and 3 will have somewhat higher volumes).
6. Observe the instrument user interface for Pipetter error 21 or any Dispenser errors.

If more detailed instructions are needed, refer to the Vitek2 online manual and/or the Vitek2 Instrument User's Manual.

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Troubleshooting

Biomerieux Technical Support

Contact the Biomerieux Technical Support Customer Service Hotline for all technical support or information.

Technical Support phone #: 1-800-361-7321

They may require the following information which can be found on the front of each Vitek analyzer:

- Customer number: 2013444
- Vitek system number: 152947
- Vitek #1 serial No: VTK2XL 5505
- Vitek #2 serial No: VTK2XL 5462

Manual download from the LIS

1. From the LIS main menu, click on “Interfaces”.
2. Double click on instrument menu.
3. Highlight Myla, click on “Create Loadlist”.
4. “Way of Classifying Orders” choose “All Orders”.
5. Choose “From date”.
6. Enter “From order” number.
7. Click “OK”.
8. Click “Add All”.
9. Click “OK”.
10. To mark order(s) to download:
 - Options:
 1. Use the space bar.
 2. Right click on the order.
 3. Type in the order number.
11. Click on “Download selected Order(s)” icon.

To Search for a Result:



1. From toolbar, select WORKLIST
2. Click “Clear all filters” (Large Funnel Icon)
3. Click “Accession ID”

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- a. Enter or scan lab ID
- b. You can also filter by patient ID or patient name

To change an isolate number:

1. Click on the isolate number field and select the new isolate number.
2. A confirmation window will appear. Choose “OK” or “Cancel”.
3. Click “Transfer isolate data”.

To choose a “Low Discrimination” identification or to change an identification:

1. Click on the “<<Low Discrim>>” field or identification field and select the identification.
2. A confirmation window will appear. Choose “OK” or “Cancel”. If you have chosen “OK” the isolate will be automatically re-analyzed.
3. Click “Transfer isolate data”.

To change the order number:

1. You can delete the order number by clicking on the order number field and using the backspace or by highlighting the number and pressing the “delete” key.
2. Enter the new order number.
3. A confirmation window will appear. Choose “OK” or “Cancel”. If you have chosen “OK” the isolate will be automatically re-analyzed.
4. Click “Transfer isolate data”.

To enter on AST Offline test:

1. Click on the “AST Offline Tests field”. Choose “Beta-Lactamase +” or “Beta-Lactamase-“.
2. A “confirmation” window will appear. Choose “OK” or “Cancel”. If you have chosen “OK” the order will be automatically re-analyzed.
3. If you want to transfer a finalized isolate, click on the “Transfer isolate data” icon Click on “Enter Isolate View”.

To delete an individual card still “in progress”:



1. From the toolbar, select WORKLIST
2. Click “Clear all filters” (Large Funnel Icon)
3. Click on small funnel icon next to “Accession ID”
4. Enter or scan the order number
5. Click Apply Filter

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6. Click on order you wish to edit
7. Click on Eject Cards
8. Select whether you wish to eject Isolate or AST card
9. A confirmation window will appear, choose “OK” or “Cancel”
 - i. Note: this action is not reversible

To delete a completed individual card or entire order (ID card/AST card):

1. From the toolbar, select WORKLIST
2. Click “Clear all information”
3. Click on small funnel icon next to “Accession ID”
4. Enter or scan the order number
5. Click Apply Filter
6. Click on order you wish to edit
7. Click on Delete Isolate
8. Select whether you wish to delete Isolate or AST card
9. A confirmation window will appear, choose “OK” or “Cancel”
 - i. Note: this action is not reversible



Printing Vitek Results

1. From the toolbar, select WORKLIST
2. Click “Clear all filters” (Large Funnel Icon)
3. Click on small funnel icon next to “Accession ID”
4. Enter or scan the order number
 - a. You can also find a report using accession ID/ patient name/ date tested
5. Click Apply Filter
6. Select report(s) you would like to print
 - a. You can batch print by selecting multiple reports
7. Click the printer icon
8. Select “Lab Report” and/or detailed report “AST 67/391/580 Card Detailed Report”
9. Click the printer icon
10. Click OK

Searching for an Order in Long-Term Data Storage:

Note: orders in long term storage may not be re-interpreted.

1. From the toolbar, select TOOLS

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2. Select Long-Term Data Storage.
3. Click “Clear all filters” (Large Funnel Icon)
4. Search criteria:
 1. For Patient ID enter MRN.
 2. For Accession ID enter order number.
 3. Patient last name
 4. Test date
5. Click on order.

Quality Control

Instrument QC Status report:

Refer to “Daily Instrument Maintenance”.

To register new shipments of ID/AST cards:

1. Login to Vitek 2 Web
2. From the toolbar, select “TOOLS”
3. Click on “Shipments”.
4. Enter lot number and date received (duplicate lots will all be isolate 1).
5. Check off “certificate of conformance”
6. Click “add shipment”

Note: All QC cards must use only ATCC numbers to be included in the QC program. Non-ATCC numbers will appear only in the patient data program and cannot be moved to the QC program.

Vitek ID Card QC

QC must be performed on GN/GP upon receipt of new shipment of cards by QC bench.

Note: QC must be performed on both Vitek #1 and Vitek #2 instruments

To program QC of GN/GP cards:



1. Login to FLEXprep
2. Scan or enter cassette ID
3. Click “QC” – FLEXprep will automatically register isolate as QC organism
4. Scan GN or GP ID card
5. Select ATCC strain
 - a. For GP card setup:
 - i. ATCC 700327 Enterococcus casseliflavus

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- ii. ATCC 19258 Streptococcus salivarius ssp. thermophilus
- b. For GN card setup:
 - i. ATCC 700323 Enterobacter hormaechei
 - ii. ATCC 17666 Stenotrophomonas maltophilia
- 6. *Refer to Programming on FLEXprep section 4 for steps on how to setup and load ID cards*

Vitek Susceptibility Card QC

Vitek 67/391/580 susceptibility cards must have QC performed on receipt of new shipment of cards, weekly, and after Biomerieux preventive maintenance.

Note: QC must be performed on both Vitek #1 and Vitek #2 instruments

To program QC of 67/391/580 cards:

1. Login to FLEXprep
2. Scan or enter cassette ID
3. Click “QC” – FLEXprep will automatically register isolate as QC organism
4. Scan AST 67/391/580 susceptibility card
5. Select ATCC strain
 - a. For 67 card setup:
 - i. ATCC 29212 Enterococcus faecalis
 - ii. ATCC 29213 Staphylococcus aureus
 - iii. ATCC 51299 Enterococcus faecalis
 - b. For 391 card setup:
 - i. ATCC 27853 Pseudomonas aeruginosa
 - ii. ATCC 35218 Escherichia coli
 - iii. ATCC 25922 Escherichia coli
 - c. For 580 card setup:
 - i. ATCC 29212 Enterococcus faecalis
 - ii. ATCC 29213 Staphylococcus aureus
 - iii. ATCC BA977 Staphylococcus aureus
 - iv. ATCC BAA1026 Staphylococcus aureus
 - v. ATCC BAA976 Staphylococcus aureus
6. *Refer to Programming on FLEXprep section 6 for steps on how to setup and load susceptibility cards*

Reviewing susceptibility cards with QC deviation


1. From the toolbar, select WORKLIST
2. Click “Clear all filters” (Large Funnel Icon)
3. Click on small funnel icon next to “Accession ID”.

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4. Check off 2nd box, “Select a QC reference ID to filter”
 - a. Apply filter
 - i. Note: you do not need to select a specific QC ID, just check the box
5. Filter again by selecting “QC Dev”
 - a. This will show you all cards that did not pass QC
6. Click to open a card
7. Under card comments, click “edit comment” and enter actions to be taken for failed QC (ex. Repeat card).
8. Print all reports for the QA senior or charge technologist.
9. Click on “Review” icon (check mark)
 - a. Status should be changed from “to be reviewed” (green check mark) to “reviewed” (solid green).



Reviewing susceptibility cards that passed QC

1. From the toolbar, select WORKLIST
2. Click “Clear all filters” (Large Funnel Icon)
3. Click “Accession ID”.
4. Check off 2nd box, “Select a QC reference ID to filter”
 - a. Apply filter
 - i. Note: you do not need to select a specific QC ID, just check the box
5. Click to open a card
6. Click on “Review” icon (check mark)
 - a. Status should be changed from “to be reviewed” (green check mark) to “reviewed” (solid green).




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QC Reference ID ATCCBAA977, Staphylococcus aureus

Expected Organism Staph.aureus BAA977

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