

USER MANUAL



# Biomeme Go Mobile App

---

Last Updated: 02/24/2020



# Table of Contents

---

Logging In and Out	3
How To Update the App	3
How To Start Your First Run	4
During the Run	6
How To Create a New Project Folder	6
How To Create a New Protocol	7
How To Delete a Protocol	8
Interpreting Results	9
Viewing Completed Run Data	12
Viewing Incomplete Runs	12
Recovering & Reattaching Test Data	13
How To Run a Melt Curve	17
How To Transfer Data	17
Reporting a Problem or Error	18
Viewing Thermocycler Device Information	19
Switching Teams (Enterprise Plan Only)	19
Disclaimer	20


# Logging In and Out

## To log in (Requires internet connection)



1. Open the Biomeme Go mobile app on your smartphone by tapping the app icon on your phone's home screen.
2. Enter your email address and password (both are case sensitive).
3. Tap the Login button.
4. If you're part of multiple teams (Enterprise Users Only), select which team to log in under (you can toggle between teams once logged in).

*Note: If you have forgotten your password, click "Forgot Password" or email [support@biomeme.com](mailto:support@biomeme.com). If you are traveling to a remote location to perform PCR and will not have internet access while there, you must log in before your connection is lost.*

## To log out

1. Open the User menu by clicking the user icon  in the top left corner.
2. Select Logout.


# How To Update the App

1. Navigate to the Google Play Store on your smartphone by tapping the Play Store  icon on your phone's home screen.
2. Tap the hamburger menu icon  in the top left corner.
3. Select My Apps & Games.



4. Choose Update next to Biomeme Go.




*Note: If your app is already up-to-date, you will not see the app icon appear in the updates section. This is perfectly normal and no further action is required at this time.*

## How To Start Your First Run

1. Log into the Biomeme Go app if you haven't done so already (see “Logging In and Out”).
2. From the main dashboard of Biomeme Go, tap Start Run.
3. If your test kit pouch has a QR code  printed on it, you may use your smartphone camera to capture it. Simply point the camera at the QR code to be scanned.

*Note: The first time you scan a QR code, you may be asked to give your QR scanner permission to access the camera on your device. You will only have to grant permission once.*

4. If a QR code is unavailable, tap Select Test to choose from a list of available tests. If your test is unavailable in the list, then you'll need to create a new protocol (see “How to Create a New Protocol”).
5. Select the quantity of 3-well Go-Strips to run simultaneously in your thermocycler by adjusting the  (add) and  (subtract) icons, then tap Confirm. The maximum number of Go-Strips per test run is 3.
6. Biomeme's Go-Strips are highly adaptable to meet your individual needs, so choose the run layout that fits your test best.

7. Choose to Scan or Generate your Sample IDs. You can change these on the next screen if you'd like. You're able to scan barcodes and QR codes from directly within the app.
8. Review your Sample IDs and tap Continue once you're ready to proceed.
9. Select which folder you would like to save your run into. If you haven't yet created a folder, click Add Folder located towards the top right corner to create one.
10. Once you have selected the folder to save your run into, you can optionally change your Run Name, update your GPS Coordinates, and/or add Location tags.
11. If you wish, you can add a note to the run file by selecting the Note icon  in the upper right corner.
12. Tap Confirm to proceed to Run Setup.
13. If you haven't already, power on your thermocycler by pressing the Power  button on top of your device and tap Continue back in the Biomeme Go app.
14. If your smartphone is not already connected to your thermocycler via Bluetooth (BLE) or serial, the app will prompt you to connect. Enable Bluetooth on your thermocycler by pressing the Bluetooth  button on top of the device.
15. Tap Scan in the app and wait a few seconds for your device to be found.
16. Once the thermocycler is found, select it in order to pair your devices.

***Note:** The first time you try scan for devices, you'll be asked to give the Biomeme Go app permission to turn on Bluetooth. Please make sure that the "Location" service is enabled in your phone settings. The latest version of Bluetooth requires that location discovery is enabled to properly pair devices.*

17. You are almost ready to start your run. If you would like to, select [View Load Strips Tutorial](#) located below the [Confirm](#) button to learn more about properly loading your Go-Strips into your thermocycler. If not, tap [Confirm](#) to proceed.
18. Ensure your Go-Strips are loaded and the lid is closed on your thermocycler before starting your run.
19. Tap the [Start Run](#) button!

## During the Run

1. The Biomeme Go app will remain in live view while the test runs. The app will display how many minutes remain in your run, the thermocycler battery percentage, and the cycle number.
2. By swiping to the left, you will be able to view real-time data as the test proceeds. You can toggle between Go-Strips by touching the wells you wish to view using the tabs at the top of the screen. You can always swipe to the right to return to the previous screen.
3. You can manually stop the run at any time by tapping the [Stop](#) button in the upper right corner. Do note that this will end the run and you will not be able to restart the test. The run data up to that point will then be available in the [Data Management](#) section of the app. Runs intentionally stopped by the user are not considered incomplete runs.

***Note:** You do not need to worry about your smartphone screen turning off or going to sleep. The experiment will continue to run. If the app freezes or crashes, the experiment will also continue to run and your data can be found in the Incomplete Runs section of the app once you've reloaded the Biomeme Go app and reconnected to the thermocycler. For more information on Incomplete Runs, please refer to the "Recovering & Reattaching Test Data" section.*

## How To Create a New Project Folder

1. Log into the Biomeme Go app if you haven't done so already (see "Logging In and Out").
2. Select Data Management from the main dashboard of Biomeme Go.
3. Tap Add Folder.
4. Enter a name for your new folder.
5. Tap the Add Folder button to create and save.

## How To Create a New Protocol

1. Log into the Biomeme Go app if you haven't done so already (see "Logging In and Out").
2. Select Protocol Management from the main dashboard of Biomeme Go.
3. Tap Add.
4. Enter a name for your new protocol (e.g. Northern Pike).
5. If you wish, give your target(s) names.
6. Edit your thermocycling parameters as needed by clicking on each text field that you would like to change.
7. Enable or disable Reverse Transcription and Extension steps by adjusting the toggle accordingly.
8. Tap Confirm to save your new protocol.

# How To Delete a Protocol

1. Log into the Biomeme Go app if you haven't done so already (see "Logging In and Out").
2. Select Protocol Management from the main dashboard of Biomeme Go.
3. Swipe left on the name of the protocol you wish to delete.
4. Tap the red Delete button that appears. Once a protocol is deleted, you cannot recover it.



# Interpreting Results

Depending on your protocol, quantitative and/or qualitative results will be available for your review within 45 minutes to an hour. Below are a few examples of each as well as amplification plots for baselined and raw data.

*Note: The colors, statements, and Cq values used in the screenshots below are only examples and your results interface may vary. Please consult your Team Admin for details regarding the Cq ranges for your team's protocol(s).*

## Quantitative Interpretation



- Export Your Results**  
 Share your results via email or download to a shared drive (e.g. Google Drive).
- Fluorescent Channels**  
 See which fluorescent channels were used and amplified during your run (e.g. Green, Amber, Red).
- Well Selection**  
 Toggle tabs to see your results per Go-Strip, per channel (e.g. Wells 1 - 3, 4 - 6, 7 - 9).
- Quantitative Results (Cq)**  
 View Cq values for each of your targets.
- Baselined Data**  
 View amplification plots for your baselined data.
- Raw Data**  
 View amplification plots for your raw data.

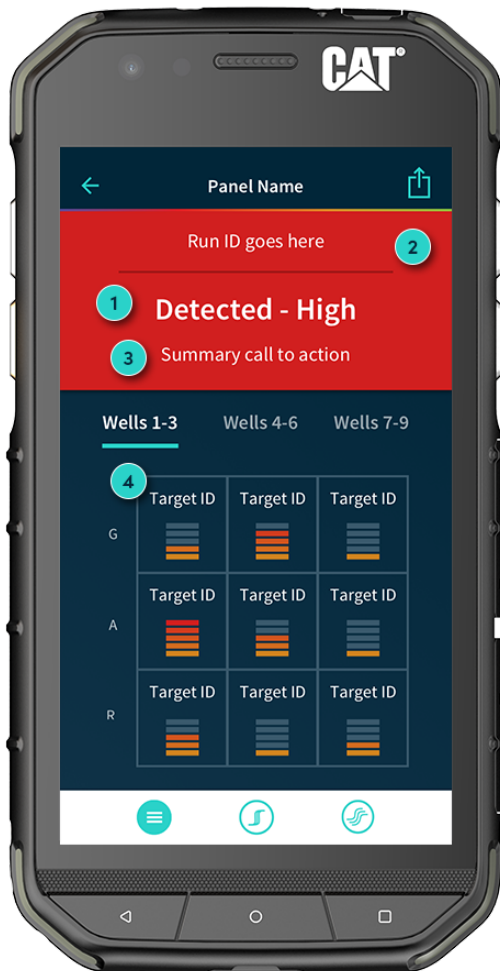
### Baselined Data Example



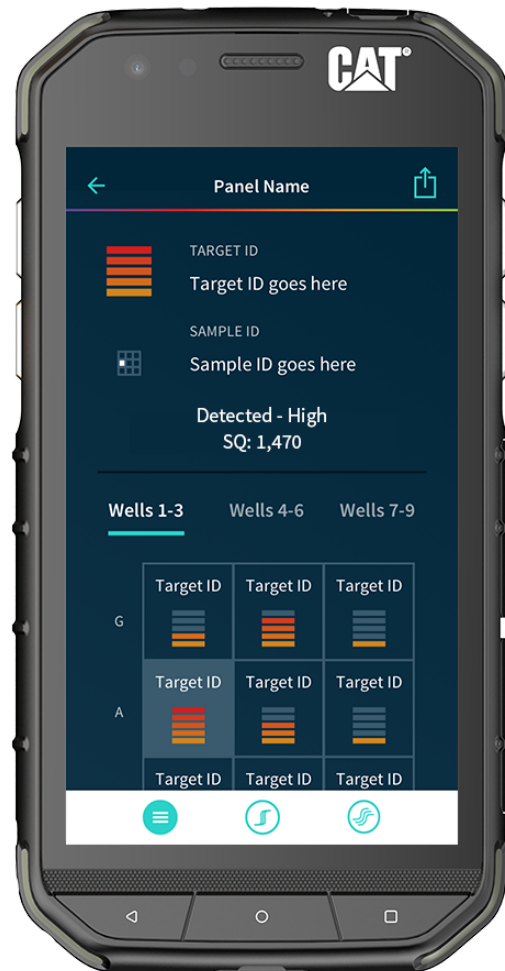
### Raw Data Example



## Qualitative Interpretation



## Target Drilldown View



1. **Major Summary Statement**  
Your summary result message refined by Cq ranges (e.g. 1 - 300 = low, 301 - 3,000 = medium, > 3,000 = high).
2. **Background Color**  
Background color based on your test result (e.g. green, yellow, red).

3. **Minor Summary Statement**  
Your instructions for what to do next based on the result (e.g. send to lab for further analysis).
4. **Qualitative Results**  
Your results per target refined by Cq ranges (e.g. 1 bar = Low, 2 bars = Medium, 3 bars = High).

# Viewing Completed Run Data

Run data for completed and intentionally stopped runs is available in the Data Management section of Biomeme Go.

1. Log into the Biomeme Go app if you haven't done so already (see "Logging In and Out").
2. Select Data Management from the main dashboard of Biomeme Go.
3. Choose the folder in which your run data is saved.
4. Tap the name of the run you wish to view.

# Viewing Incomplete Runs

Incomplete Runs can occur for a variety of reasons (see "Recovering & Reattaching Test Data" for examples). If this happens, you can still view the incomplete run data:

1. Log into the Biomeme Go app if you haven't done so already (see "Logging In and Out").
2. Select Incomplete Runs from the main dashboard of Biomeme Go to view a list of all runs classified as incomplete.

***Note:** After selecting your incomplete run, please wait roughly 30 seconds before your run data begins to populate. Be sure to connect to your thermocycler via wire or Bluetooth so your app can automatically transfer data off the thermocycler once available. Runs that are intentionally stopped by the user are not considered incomplete runs and the run data will not be available in this section of the Biomeme Go app.*

# Recovering & Reattaching Test Data

## Common Scenarios

Did you start your run and return to your thermocycler later in the day only to realize it's now off? Maybe your app crashed or your phone died and you're wondering how to retrieve your test results? Below are some common scenarios and the steps to take to get your results. You can find this same protocols with their connected How-To videos on our Help Desk:

<https://help.biomeme.com/reattach-recover-guide>

Scenario Reference Table		Biomeme Go App	
		Open	Closed
Franklin Thermocycler	On	<a href="#">A</a>	<a href="#">B</a>
	Off	<a href="#">C</a>	<a href="#">D</a>

**Note:** DO NOT push **Stop Run** in the app. This will lose any run data that has not successfully synced from the device to the app. For security reasons the same smartphone that was used to initiate the test must be used to download the test results.

**“My test has been running for a while but the number of cycles isn’t decreasing on the app. What should I do?”**

This means that the Bluetooth connection between the device and the app has been interrupted. **DO NOT press Stop Run**. Instead you just need to reset the Bluetooth connection. Follow the steps in Scenario **A** below.

***“My run has completed and I’ve pressed a bunch of buttons. I’m feeling flustered, confused, and frustrated; what should I do?”***



1. Turn off the thermocycler and close the Biomeme Go app.
2. Follow the steps described in Scenario **D** below.

If you’re still having problems recovering and/or reattaching your test data, please contact [support@biomeme.com](mailto:support@biomeme.com)

***“My Biomeme Go app is returning a WRONG THERMOCYCLER error.”***



1. Turn off the thermocycler and close the Biomeme Go app.
2. Follow the steps described in Scenario **D** below.

***A: Thermocycler ON / App OPEN***



1. Press the Bluetooth  button on top of the thermocycler to turn OFF the Bluetooth.
2. Press the Bluetooth  button on the top of the thermocycler to turn the Bluetooth back on.
3. Within the Biomeme Go app, you should see a pop-up screen that reads: **“Connect via BLE”**. If so, press Scan in the Biomeme Go app. If not, power OFF the thermocycler, CLOSE the app, and to to Scenario **D** below.
4. Select your thermocycler.
5. Tap Confirm in the app.


*Note: If your test is currently running, the LED on the front of your thermocycler will be blinking amber. If your test has been completed, the LED will be blinking blue.*

## **B: Thermocycler ON / App CLOSED**

1. Relaunch the Biomeme Go app by selecting the icon on your smartphone's home screen.
2. Press the Bluetooth  button on top of the thermocycler to turn OFF the Bluetooth connection.
3. Press the Bluetooth  button on the top of the thermocycler to turn the Bluetooth connection back ON.
4. From the app's home screen, tap Incomplete Runs.
5. Select your test from the list of incomplete runs.
6. Press the Scan button in the app and select your thermocycler.
7. Tap Connect via BLE.
8. Tap the Reattach Test button.
9. Please wait while your run data is transferred.




## **C: Thermocycler OFF / App OPEN**

1. Press the Power  button on top of your Franklin™ thermocycler to turn it back on. If your thermocycler doesn't turn back on, make sure it's connected to a power source as your battery may have died.
2. Press the Recovery  button on top of your thermocycler.

3. The thermocycler will quickly blink blue, white, red, then green indicating it has successfully recovered the previously completed or failed run.
4. Press the Bluetooth  button on top of your thermocycler.
5. Press Scan in the Biomeme Go app.
6. Select your thermocycler.
7. Please wait while your run data is transferred.

**Note:** *This assumes your test was completed **before the thermocycler powered off**. It is usually not possible to reattach and recover the run data if the thermocycler shut off during the run. Please always ensure your device has at least 20% battery power before starting your run.*

### **D: Thermocycler OFF / App CLOSED**

1. Press the Power  button on top of your Franklin™ thermocycler to turn it back on. If your thermocycler doesn't turn back on, make sure it's connected to a power source as your battery may have died.
2. Press the Recovery  button on top of your thermocycler.
3. The thermocycler will quickly blink blue, white, red, then green indicating it has successfully recovered the previously completed or failed run.
4. Press the Bluetooth  button on top of your thermocycler.
5. Relaunch the Biomeme Go app by selecting the icon on your smartphone's home screen.
6. From the app's home screen, tap Incomplete Runs.



7. Select your test from the list of incomplete runs.
8. Press the Scan button in the app and select your thermocycler.
9. Tap Connect via BLE.
10. Tap the Reattach Test button.
11. Please wait while your run data is transferred.


**Note:** *This assumes your test was completed **before the thermocycler powered off**. It is usually not possible to reattach and recover the run data if the thermocycler shut off during the run. Please always ensure your device has at least 20% battery power before starting your run.*

## How To Run a Melt Curve

1. Log into the Biomeme Go app if you haven't done so already (see "Logging In and Out").
2. Tap Protocol Management from the main dashboard of Biomeme Go.
3. Tap Add.
4. Select Melt Curve.
5. Set your desired parameters:
  - a. Melt Starting Temperature (C°)
  - b. Melt Ending Temperature (C°)
  - c. C° Per Step
6. Tap Confirm.
7. Tap Start Run.


**Note:** PCR and Melt Curves are separate runs in Biomeme Go. After your PCR finishes, create a new Melt Curve run (following the steps above). The PCR and Melt Curve data will be stored as separate runs within the app and to Biomeme Cloud users.

## How To Transfer Data

1. Log into the Biomeme Go app if you haven't done so already (see "Logging In and Out").
2. Tap Data Management from the main dashboard of Biomeme Go and choose your desired folder.
3. Tap on the name of the run.
4. Once on the test result screen, tap the Share icon  in the top right corner. A menu will slide in with different sharing options for you to choose from.
5. We recommend selecting your email client (e.g. Gmail), then enter the email address to which you wish to send your data. Do not delete the automatically generated attachment; this is your data. Send your email.
6. Alternatively, you may transfer your data via Bluetooth transfer from your smartphone to a computer. To do so, make sure that both your smartphone and the computer have enabled Bluetooth transferring between devices.


**Note:** Cutting and pasting OR deleting the .xlsx file(s) will permanently delete them off the smartphone. If you want the files to remain, make sure to only copy and paste. Exact steps for transferring data from your smartphone to your computer could vary depending on your operating system. If you require further assistance, please contact [support@biomeme.com](mailto:support@biomeme.com).

## Reporting a Problem or Error



1. Log into the Biomeme Go app if you haven't done so already (see “Logging In and Out”).
2. Tap the Gear icon  in the top right corner to open the Settings menu.
3. Click the Settings sub-menu item.
4. Under Contact Us, click Report Error.
5. Select your email client (e.g. Gmail) and add [support@biomeme.com](mailto:support@biomeme.com) to the “To” field if it's not already there. An email will automatically be drafted on your behalf with all the necessary device information for us to better help resolve your issue(s).

*Note: Do not remove the body or the attachment that was automatically added to your email. This information helps our engineering teams troubleshoot.*

## Viewing Thermocycler Device Information

1. Log into the Biomeme Go app if you haven't done so already (see “Logging In and Out”).
2. Tap the Gear icon  in the top right corner to open the Settings menu.
3. Select the Settings sub-menu item and from there you'll see thermocycler-specific information (e.g. Software Version, Serial Number, MAC Address, etc.).

# Switching Teams (Enterprise Plan Only)

1. Log into the Biomeme Go app if you haven't done so already (see "Logging In and Out").
2. Tap the Gear icon  in the top right corner to open the Settings menu.
3. Click the Switch Team sub-menu item.
4. Select from the list of available teams.
5. Alternatively, tap the User icon  in the top left corner and choose Selected Team to make a switch.

## Disclaimer

**For Research Use Only.** Not for use in human or veterinary diagnostics. The performance characteristics of this product have not been established.

Biomeme products may not be transferred to third parties, resold, modified for resale or used to manufacture commercial products or to provide a service to third parties without written approval of Biomeme, Inc.

Biomeme warrants every thermocycler to be free of defects in material and workmanship for one year from the date of shipment to buyer. All warranties are subject to our [Terms and Conditions and Privacy Policy](https://biomeme.com/privacy-policy-and-terms-of-use/) (https://biomeme.com/privacy-policy-and-terms-of-use/).

Biomeme, Inc.  
1015 Chestnut Street, Suite 1401  
Philadelphia, PA, USA 19107  
[support@biomeme.com](mailto:support@biomeme.com)

[Patent Protected](https://biomeme.com/patents/)  
(https://biomeme.com/patents/)

