

MX3 App Guide (May 2023)

The MX3 App allows you to take measurements, automatically log data to user profiles and manage users within your organization.

This guide will walk you through how to use the MX3 App.

If your organization is **already using MX3 products**, please contact your MX3 administrator to request access. Do not create a new account.

For a video guide on using the MX3 App visit: <https://mx3diagnostics.com/setup>.

First-Time Setup

Download the MX3 App

To download the MX3 App, search for “MX3 Diagnostics” in the iOS App Store or Google Play Store or visit <https://mx3.app/> for a direct link.



Create an Account

*Note: If your organization is **already using MX3 products**, please contact your MX3 administrator to request access. Do not create a new account.*

We recommend setting up your account using the MX3 Portal. You can find instructions on how to set up your account at <https://mx3diagnostics.com/setup>.

Alternatively, you can set up your account through the app.

Click “Create an Account” and follow the prompts to sign-up for an MX3 Account.

App Overview

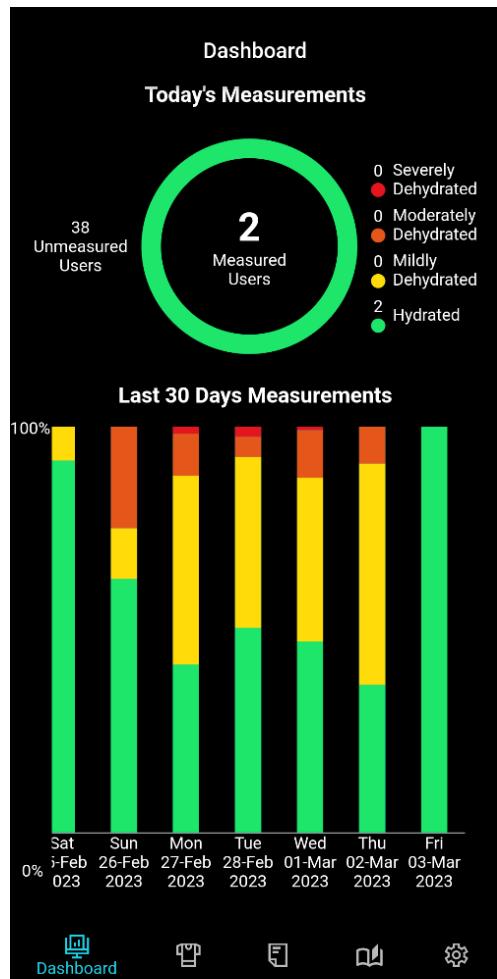
Tabs in the MX3 portal are accessed using the buttons at the bottom of the screen.



The Dashboard

The **Dashboard** gives you a quick summary of the hydration status of your Organization.

Data displayed on the dashboard can be customized by tapping on the icon.



The Users Tab

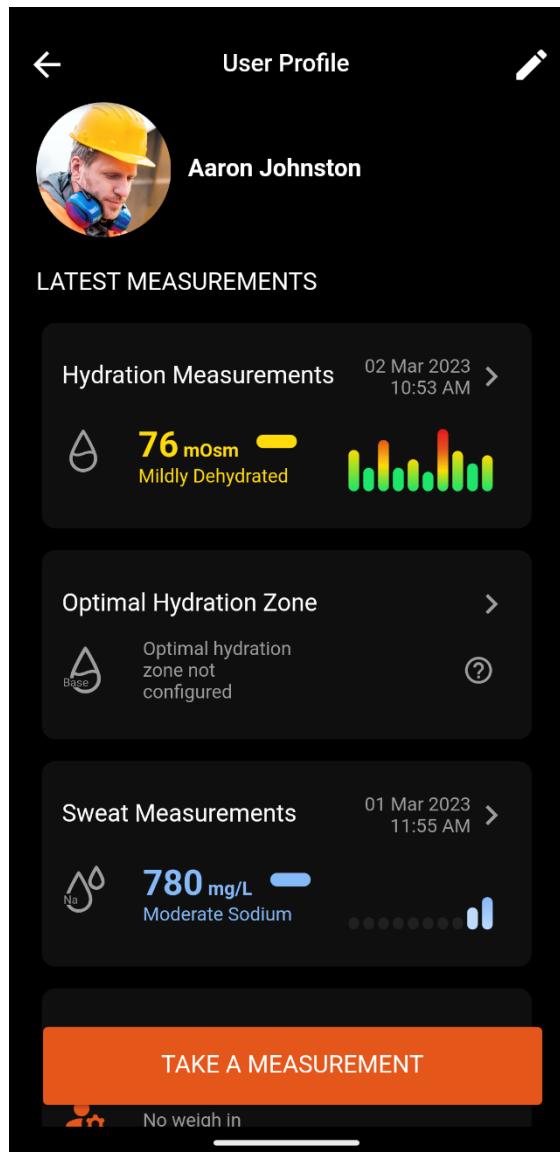
The **Users Tab** is a list of users which are available to be measured.

To view a user's profile, tap on their name or photograph. To take a measurement, tap on the icon next to the desired user. To create a new user account, tap on the icon.

The Users tab screen shows a list of users in a table format. The columns are 'Sessions' (which is greyed out) and 'Users'. There is also a '+' icon in the top right corner. Each user row contains a profile picture, the user's name, their role, and recent activity. To the right of each user is a column of letters from A to Z, with a '#' symbol at the top. To the right of the user list is a vertical scroll bar. At the bottom are five navigation icons: Dashboard, Users, Historical, Discover, and Settings.

The User Profile

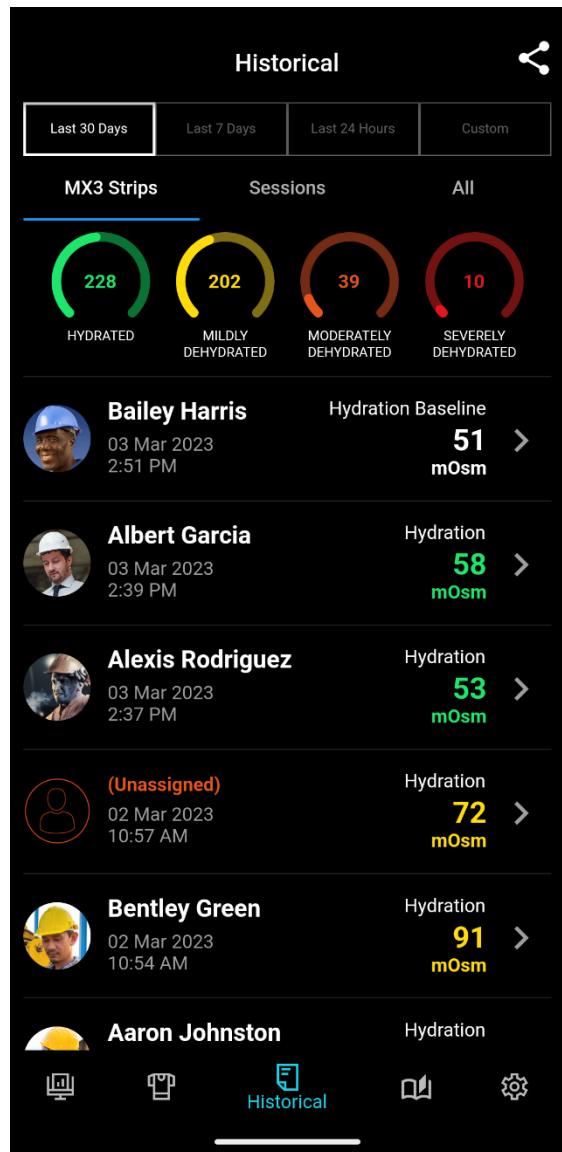
The **User Profile** displays historical data for a user and allows you to modify their account.



The Historical Tab

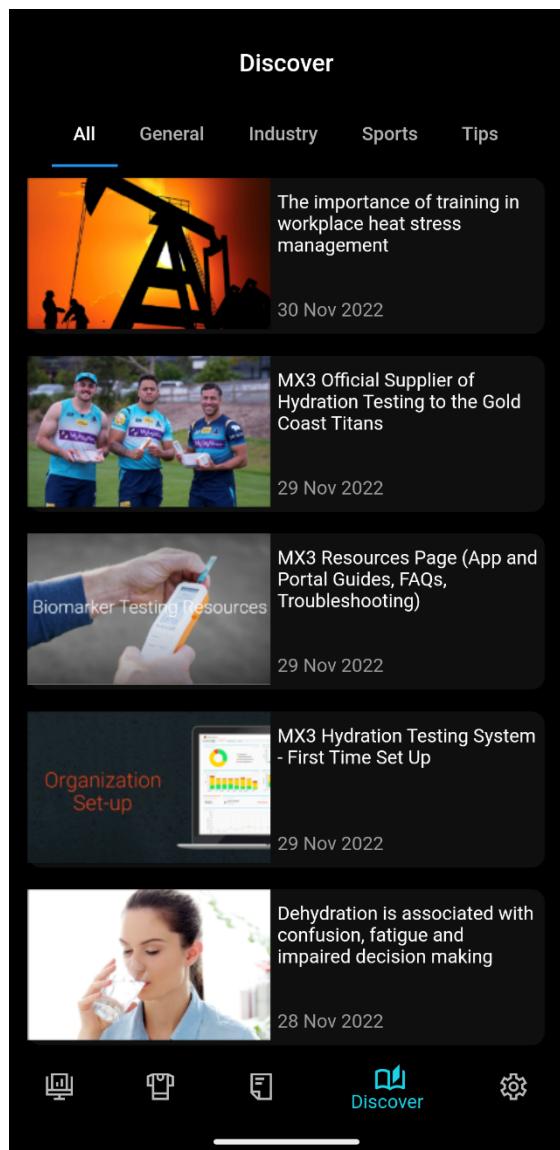
The **Historical Tab** lets you view and sort historical measurement data.

Data displayed on the Historical Tab can be customized by tapping on the icon.



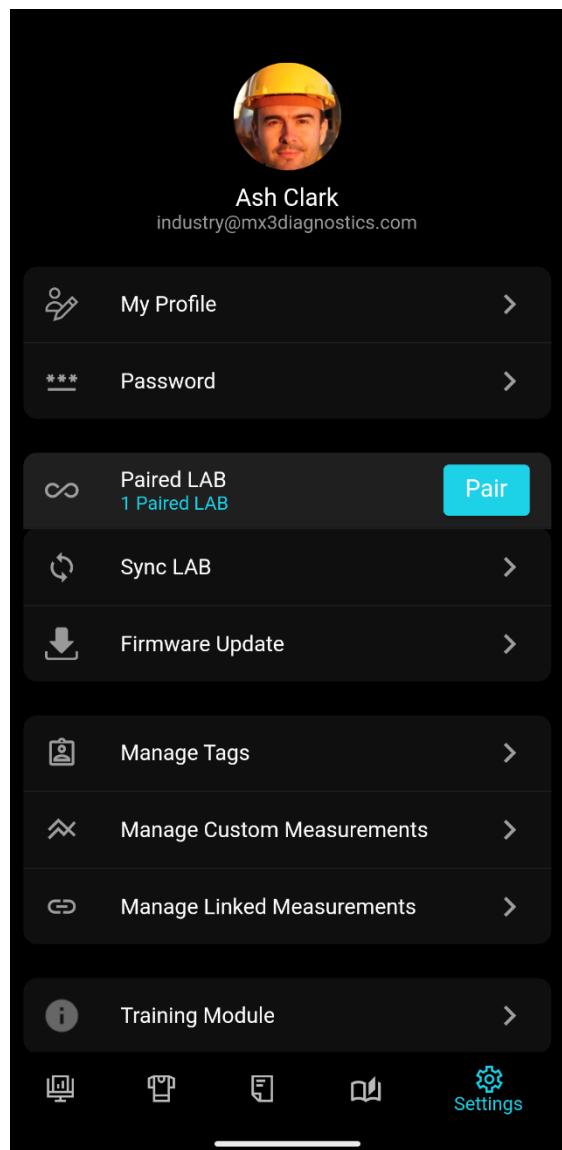
The Discovery Tab

The **Discovery Tab** is where you can access articles from MX3 about hydration science and how to get the most out of MX3 products.



The Settings Tab

The **Settings tab** is where you edit your profile and password, modify your security and privacy settings, change the paired MX3 LAB, manage custom and linked measurements and update the MX3 LAB firmware.



Adding Users to Your Organization

Adding users to your organization is best managed through the MX3 Portal, which includes a suite of bulk upload and account management tools.

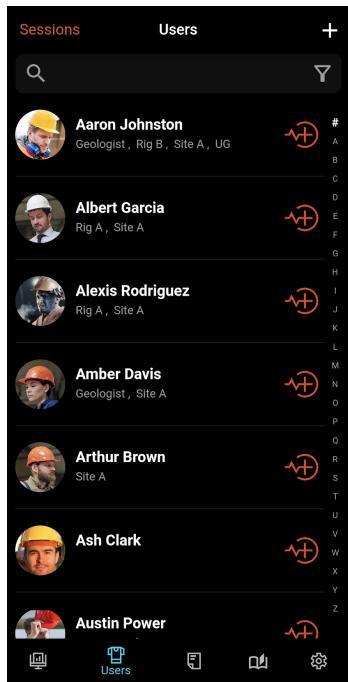
The MX3 Portal can be accessed at <https://portal.mx3.app/> using your MX3 account details. For instructions on how to use the MX3 Portal to set up your organization see the [MX3 Portal User Guide](#).

To add a User to your Organization:

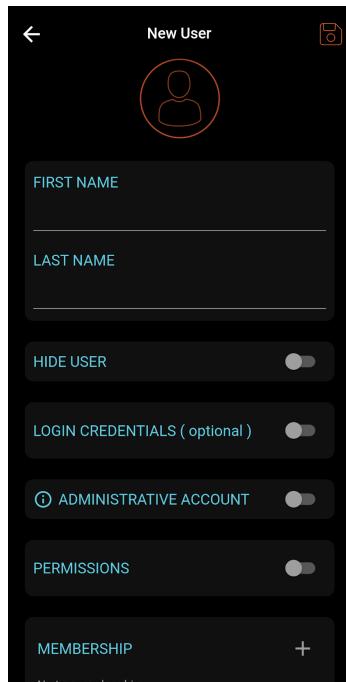
1. On the **Users Tab** tap on the  icon
2. Complete the New User Form.
 - a. **Required:** A users first or last name
 - b. **Optional:** Assign login-credentials
 - c. **Optional:** Upgrade to an administrator account
 - d. **Optional:** Assign user permissions
(see [permissions](#) in the [MX3 Portal User Guide](#) for more information)
 - e. **Optional:** Assign membership to Tags
(see [Tags](#) in the [MX3 Portal User Guide](#) for more information)
3. Tap the  icon in the top right to save.

For information about login-credentials, administrator accounts, permissions and Tags see the [MX3 Portal User Guide](#).

User Tab



New User Form



The screenshot shows the 'New User' form. It starts with a header 'New User' and a back arrow icon. Below the header is a placeholder icon of a person. The form consists of several input fields and toggle switches:

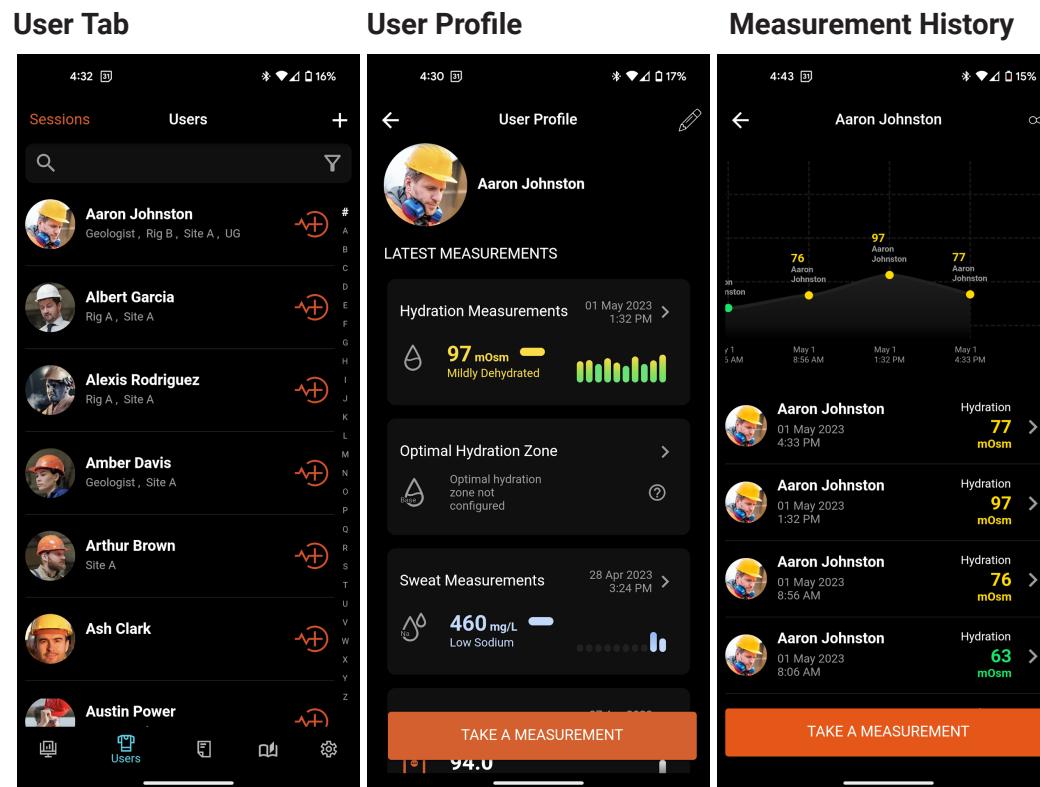
- FIRST NAME:** An empty text input field.
- LAST NAME:** An empty text input field.
- HIDE USER:** A toggle switch that is currently off.
- LOGIN CREDENTIALS (optional):** A toggle switch that is currently off.
- ADMINISTRATIVE ACCOUNT:** A toggle switch that is currently off.
- PERMISSIONS:** A toggle switch that is currently off.
- MEMBERSHIP:** A section with a plus sign icon and the text 'No tag membership'.

Viewing and Editing User Profiles

To view a user profile, tap on the name or image of the desired user on the **Users Tab**

On the User Profile page, you can:

- Edit user information by tapping on the  icon
 - Initiate a measurement for that user by tapping **Take a Measurement**
 - View a user's measurement history
 - View and establish a user's "Optimal Hydration Zone"
- (See: **Baseline Measurements**)



The image displays three screenshots of the MX3 app interface:

- User Tab:** Shows a list of users with their names, roles, and locations. Each user has a circular profile picture and a plus sign icon for adding new users.
- User Profile:** Shows the detailed profile of "Aaron Johnston". It includes a profile picture, a "LATEST MEASUREMENTS" section showing a hydration measurement of 97 mOsm (Mildly Dehydrated), an "Optimal Hydration Zone" section indicating it is not configured, and a "Sweat Measurements" section showing a sodium level of 460 mg/L (Low Sodium). A large orange "TAKE A MEASUREMENT" button is at the bottom.
- Measurement History:** Shows a timeline of Aaron Johnston's hydration measurements. It features a graph with data points labeled 76, 97, and 77, corresponding to dates May 1, 8:56 AM, May 1, 1:32 PM, and May 1, 4:33 PM. Below the graph, five measurement cards are listed, each with a timestamp and a hydration value (77, 97, 76, 97, 63) and a "TAKE A MEASUREMENT" button.

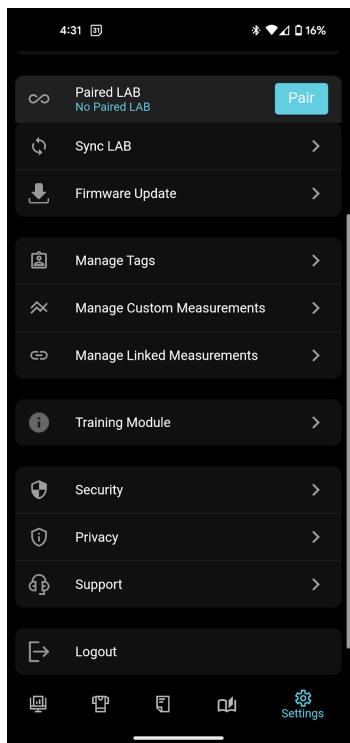
Training Modules

Appropriate measurement technique is essential for accurate measurements and reducing the number of error readings.

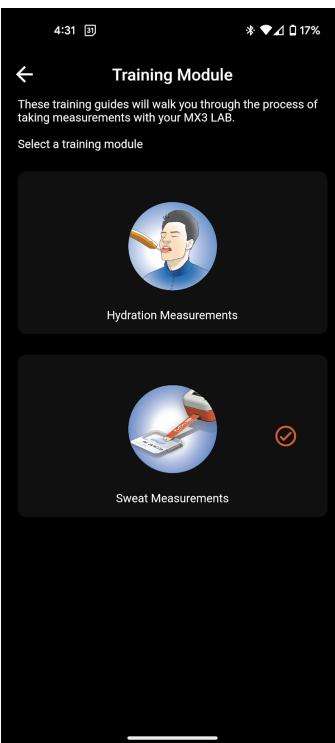
An instructional video detailing how to use the MX3 to conduct measurements can be found on our set-up page (<https://mx3diagnostics.com/setup>)

A training module, detailing how to conduct a hydration and sweat measurement can be found in the **Settings Tab** by tapping on "Training Module".

Settings Tab



Training Modules



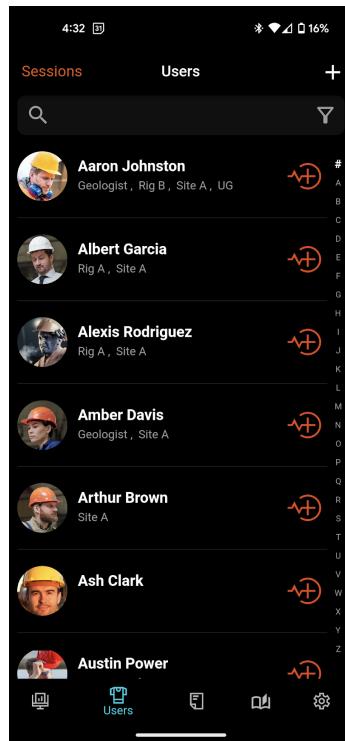
Hydration Training



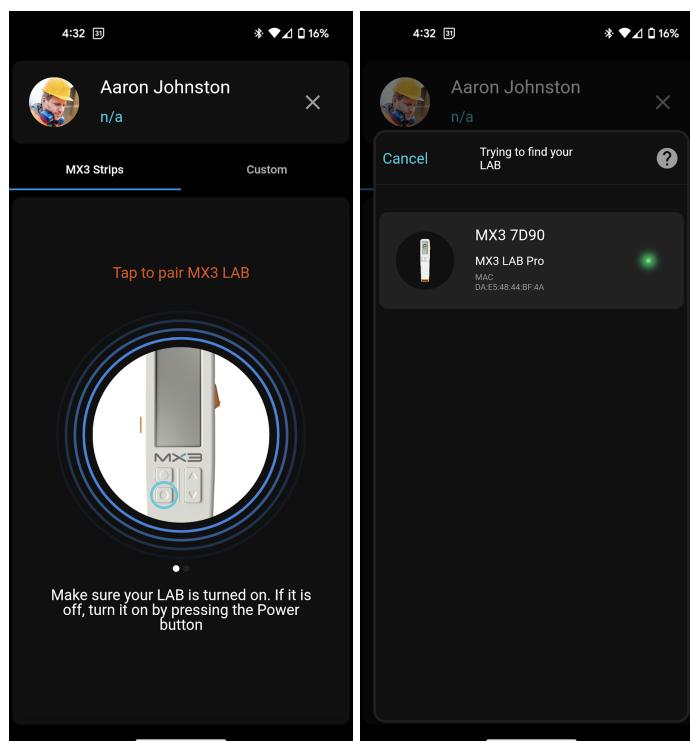
Taking a Hydration Measurement

For a video demonstrating how to conduct MX3 Hydration Measurements, and various measurement tips see <https://www.mx3diagnostics.com/setup>

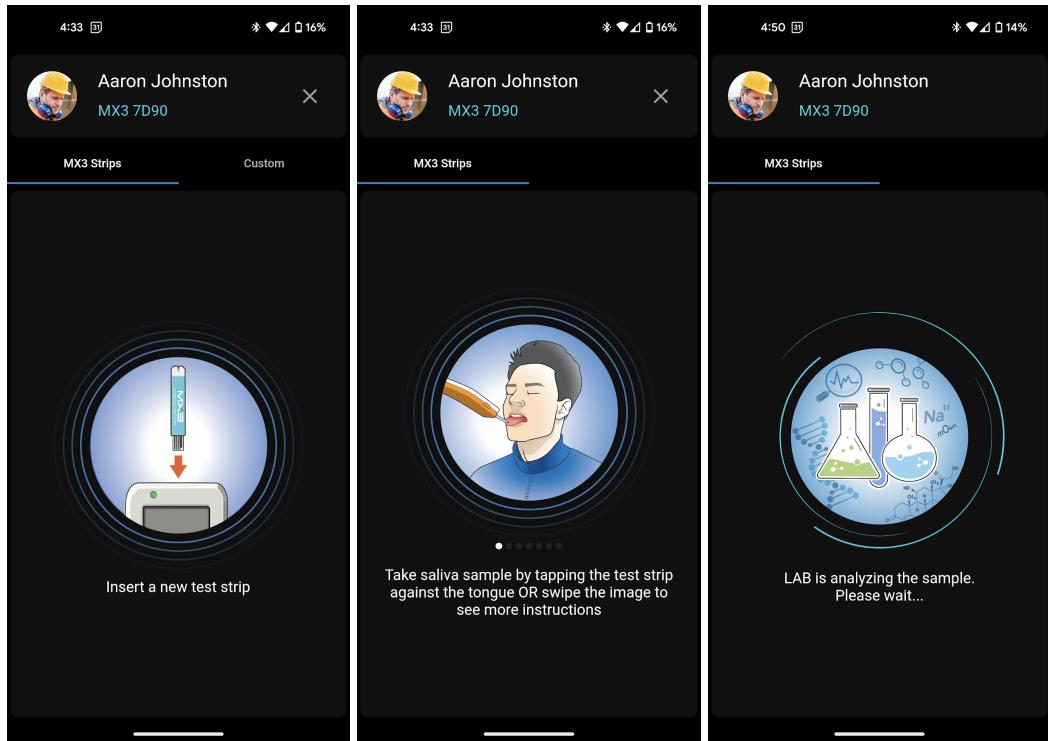
1. On the **Users Tab** tap on the  icon next to the desired user



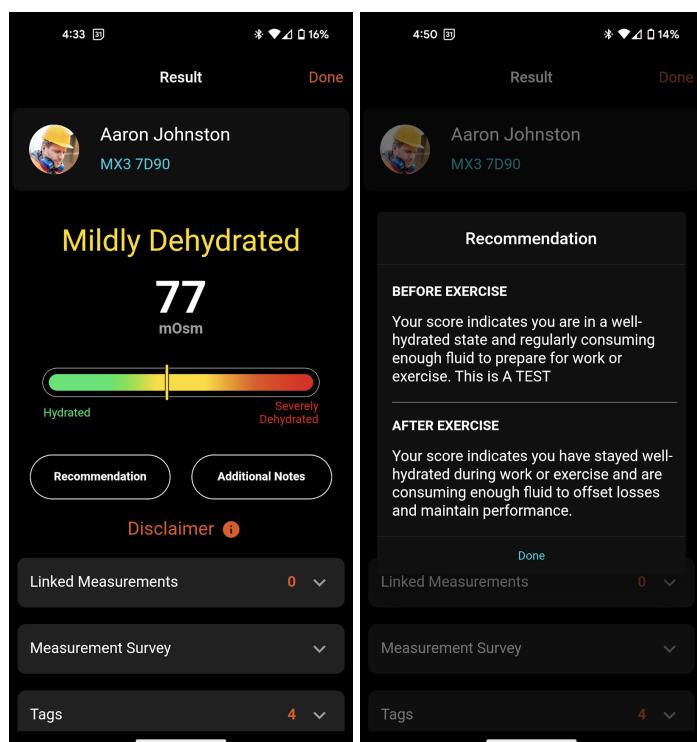
2. If required, follow the prompts to turn on your MX3 LAB and pair with the MX3 App



- Follow the prompts on the MX3 LAB and in the App, instructing you to insert a Hydration Test Strip and collect a saliva sample.



- Once enough saliva has been collected a tone will sound. Wait for the sample to be analyzed. **Do not remove the test strip.** A second tone will sound once analysis is complete.
- The result will now be displayed along with a hydration assessment.



- a. **Optional:** View a measurement recommendation by tapping **Recommendation**. You can customize the presented recommendation for your organization using the MX3 Portal.
See the [MX3 Portal User Guide](#) for more information.
 - b. **Optional:** Record a measurement note by tapping “Additional Notes”
 - c. **Optional:** Record a linked measurement (see: **Linked Measurements**) or complete a measurement survey (see **Measurement Surveys**).
6. Tap the **Done** in the top right to complete the measurement.
7. Eject the used Hydration Test Strip using the eject button on the right side of the MX3 LAB.



8. To power off the MX3 LAB, press and hold the power button until the LED indicator turns off.



Taking a sweat measurement

1. Follow the instructions on how to collect a sweat sample included with Sweat Test Kit.

1 Remove Kit Contents



Patch



Alcohol Swab



Sweat Test Strips



Sample Tube



Syringe



Sample Tray

5 Extract

Remove the Sweat Patch and place it inside the barrel of the Syringe.



Use the plunger to squeeze sweat from the patch into the Sample Tray. If there are any bubbles, allow the sample to settle for 30-60 seconds.

The sweat sample may also be collected into the Sample Tube, but should be measured within 24 hours. Pour the sample into the Tray before measurement.

2 Clean

Use the alcohol swab to clean the inner forearm (do not apply elsewhere). If you have applied sunscreen or other products to your skin, first thoroughly rinse skin with water, dry with a clean towel and then clean with the alcohol swab.



3 Apply

Allow the site to fully dry. Remove the backing tape from the sweat patch and firmly apply to the cleaned site. Peel off the outer white border and press down to create a tight seal.



4 Exercise

Exercise for 60 minutes at high intensity. The patch should appear saturated with sweat.



6 Measure

a. Insert a Sweat Test Strip into the MX3 LAB Pro.

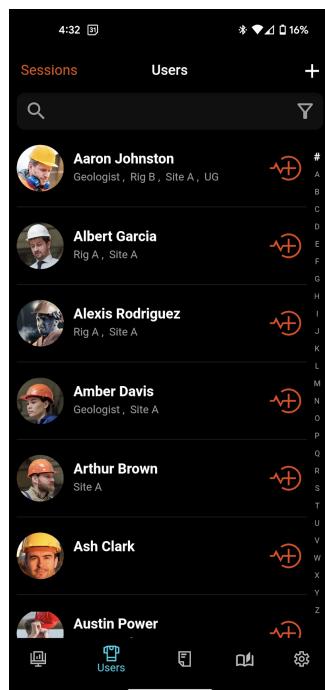


b. In the MX3 app, start a measurement by tapping next to the desired user profile or tapping the "Take a Measurement" button.

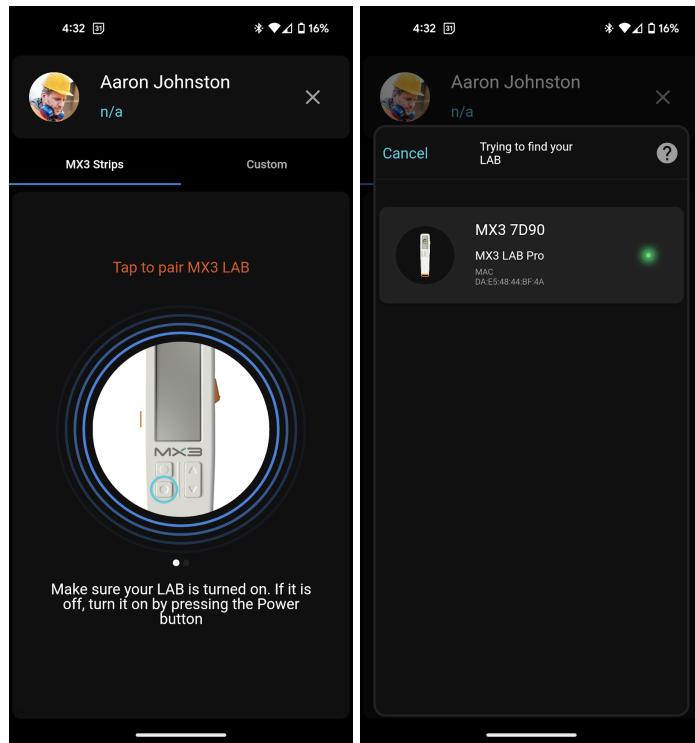


c. At least three measurements of the same sweat sample are required to establish a sweat sodium value. After each measurement, remove and discard the used test strip and insert a new one. You may be prompted to make an additional measurement. It will take 3-5 test strips to complete the measurement.

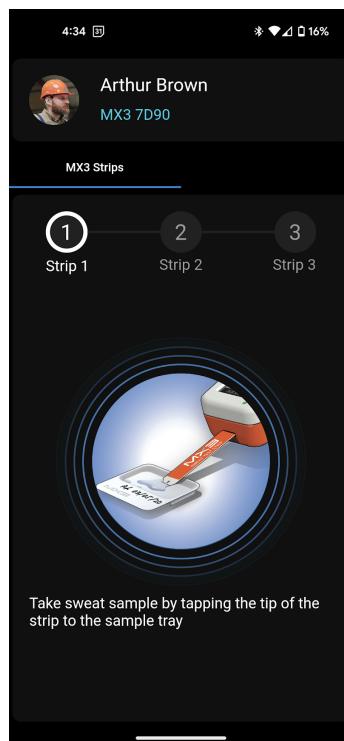
2. On the **Users Tab** tap on the icon next to the desired user



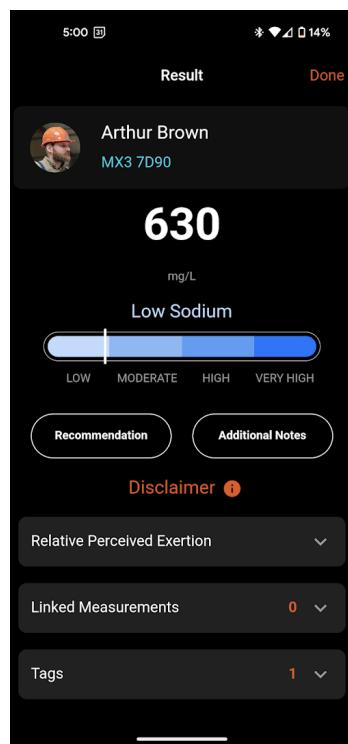
3. If required, follow the prompts to pair with your MX3 LAB



4. Insert a sweat test strip.
5. Follow the prompts in the MX3 LAB and in the App. At least three measurements are required to establish a sweat sodium measurement.



6. The result will now be displayed on the MX3 App. You can add a note to the measurement
 - a. **Optional:** You may record a measurement note, a linked measurement (see Linked Measurements) or complete a measurement survey (see Measurement Surveys).
 - b. **Optional:** You may customize the presented sweat guidance for your organization using the MX3 Portal. See the [Portal User Guide](#) for more information.



Measurement Sessions

Measurement Sessions are a way to streamline the measurement of a group of users who are routinely measured and quickly identify users who have not yet been measured.

Session groups are defined by Tags. For more information about Tags, see the [MX3 Portal User Guide](#). Session groups are active for 24 hours, after which they are archived.

To create a Measurement Session:

1. On Users Tab tap Sessions to access the sessions page.

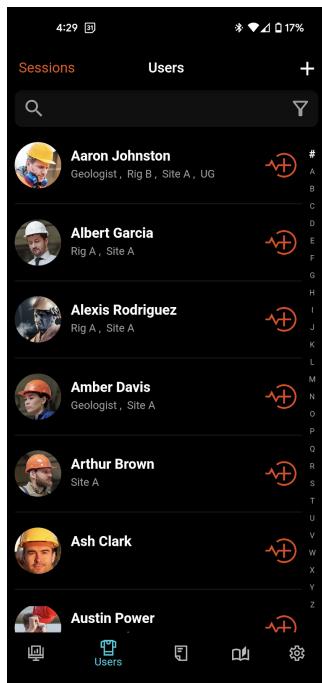
There are 4 different ways to create a session:

- a. Tap on the  icon next to All to start a session for users in your organization.
- b. Tap on the  icon next to the desired tag to start a session for users with that tag.
- c. Tap on the  icon in the top right to start a session for a combination of tags. Select the desired tags and tap Done.
- d. Tap on the Custom button and select the desired users.

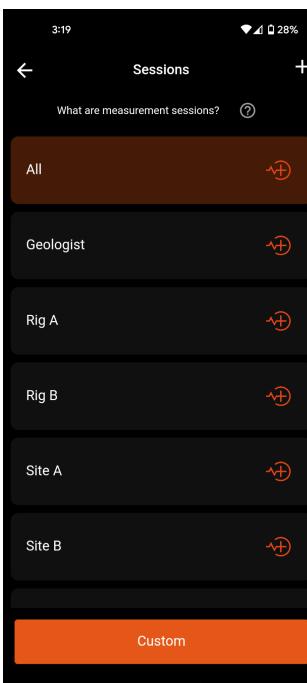
2. The Measurement Session will automatically start once created

Note: Only one session for the same Tag or Combination of Tags may be active at the same time. If you try to initiate a session with the same Tag(s) you will be prompted to archive the currently active session.

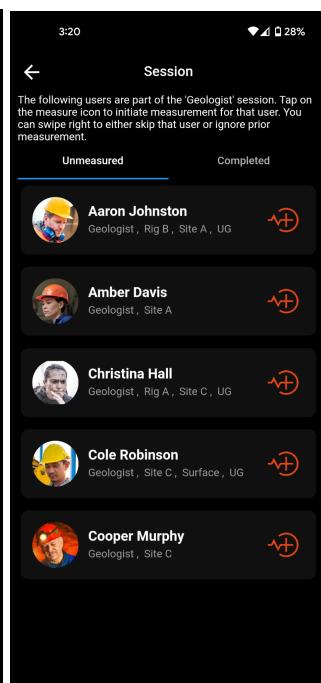
Users Tab



Sessions Page



Active Session

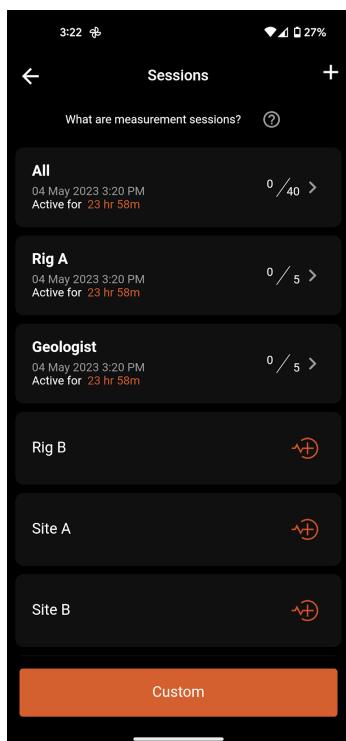


To use a Measurement Session

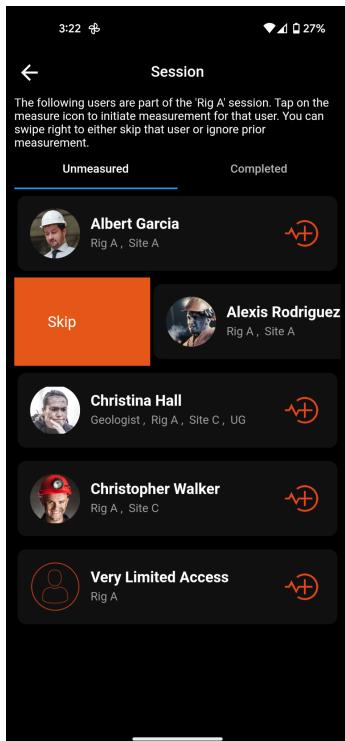
1. On Users Tab tap Sessions to access the sessions page.
2. Tap the desired session.
3. Tap on the  icon next to the desired user to initiate a measurement. Complete the measurement (See: **Taking a MX3 Hydration Measurement**).
4. Tap Done in the top right to return to the Session List.
5. **Optional:** To skip a user you, swipe right on their name from the list of unmeasured users
6. **Option:** To re-measure a user, swipe right on their name from the list of completed users.
7. Continue measuring users until all users have been measured.

Session data, including archived Sessions, can be viewed in the Historical Tab

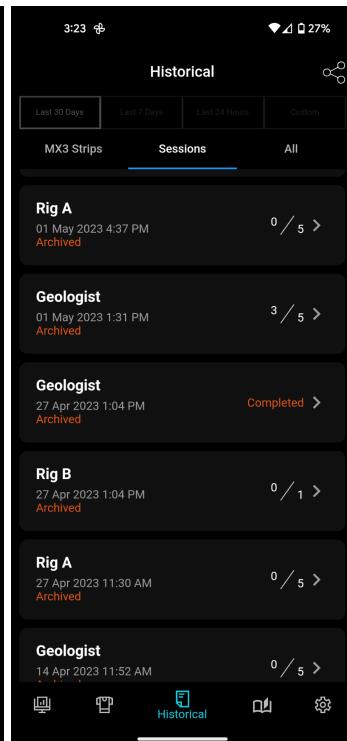
Sessions Page



Skip User



Historical Tab



Custom Measurements

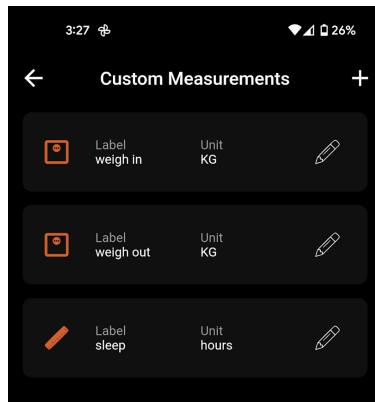
Custom Measurements are a way for values other than MX3 measurements to be stored in the MX3 App and MX3 Portal and affiliated with a user profile.

Custom Measurements are independent of any other measurement and can be recorded at any time. Any parameter which can be stored as a positive numerical value can be recorded as a Custom Measurement.

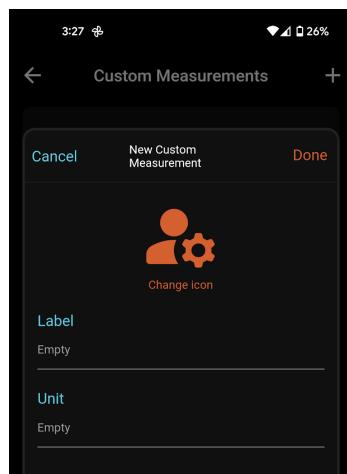
Examples of a Custom Measurement include: Weight (Kilograms), Sleep (Hours), or Time since last drink (Hours)

To set up a Custom Measurement:

1. On the **Settings Tab** tap Manage Custom Measurements

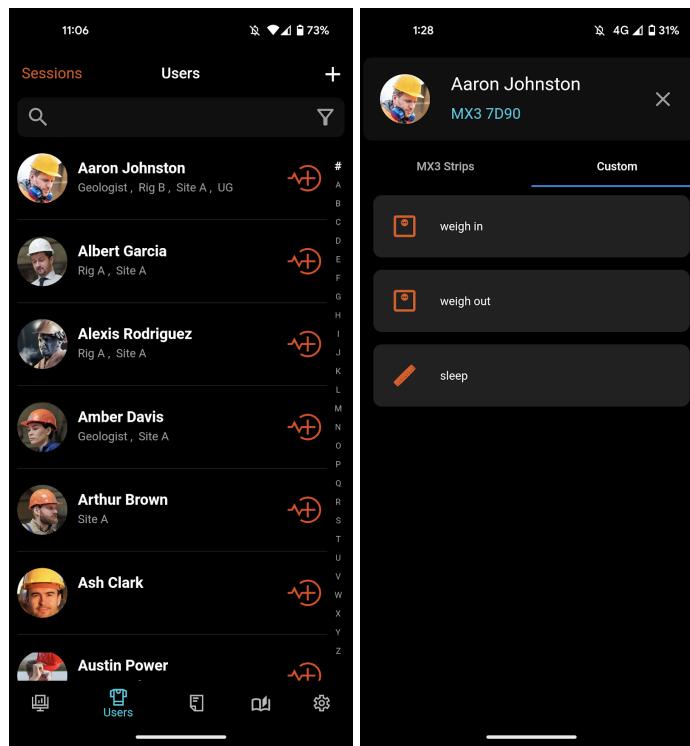


2. Tap on the **+** icon
3. **Optional:** Tap on the icon to modify the icon
4. Type the name of the Custom Measurement in the "Label" field (e.g., Sleep)
5. Type the unit of the Custom Measurement in the "Unit" field (e.g., Hours)
6. Tap **Done** in the top Right to save the Custom Measurement

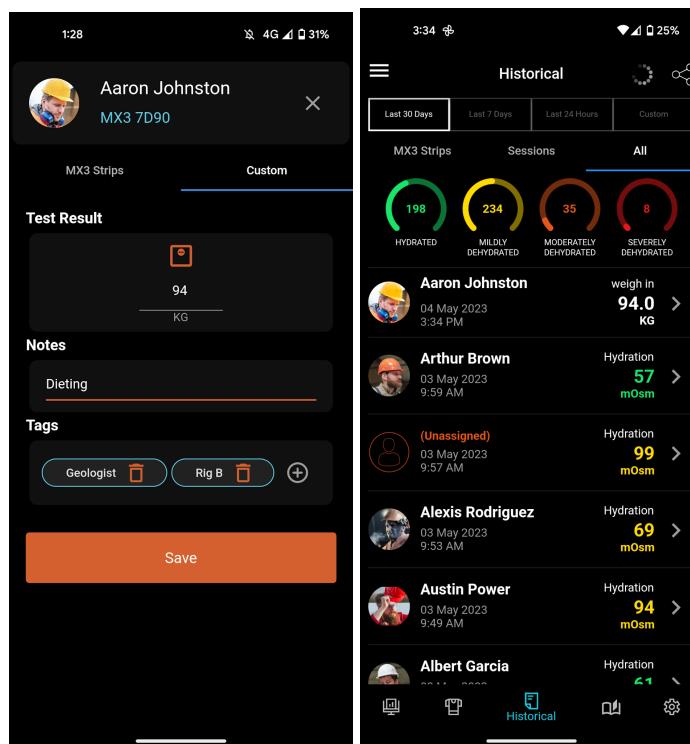


To record a Custom Measurement:

1. On the Users Tab tap the  icon next to the desired user.
2. Tap Custom



3. Tap the desired Custom Measurement and type in the measurement result
4. Tap the Save button to complete the measurement.
5. You can view Custom Measurement data on the **Historical Tab** in the **All Tab** or the **User Profile** page.



Linked Measurements

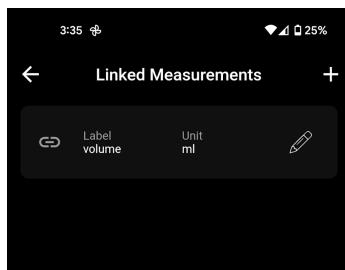
Linked Measurements are a way for additional data to be recorded alongside MX3 Hydration Measurements.

Linked Measurements are paired with a hydration measurement result and can only be recorded alongside hydration measurements. Any parameter which can be stored as a positive numerical value can be recorded as a Linked Measurement.

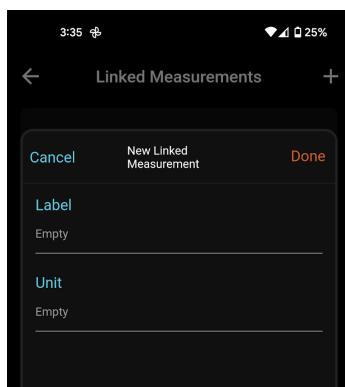
Examples of a Linked Measurement include: Body Mass Loss (kilograms), Fluid Consumed (mL), or Perceived Exertion (relative units)

To set up a Linked Measurement:

1. On the Settings Tab tap Manage Linked Measurements



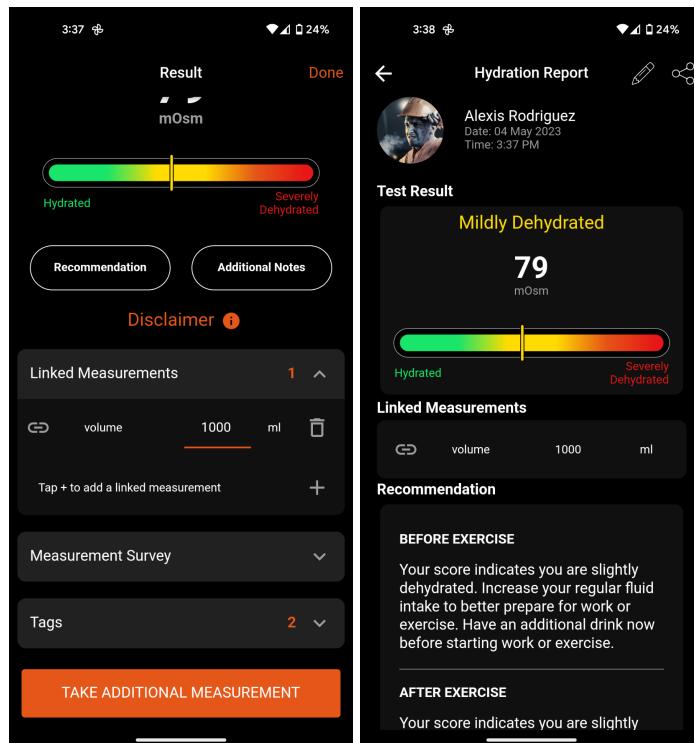
2. Tap on the **+** icon
3. Type the name of the Linked Measurement in the "Label" field (e.g., BML)
4. Type the unit of the Linked Measurement in the "Unit" field (e.g., KG)
5. Tap **Done** in the top Right to save the Custom Measurement



To record a Linked Measurement

1. Conduct a MX3 Hydration Measurement
2. On the measurement result page tap **Linked Measurements**
3. Tap **+** and select the desired Linked Measurement
4. Type in the linked measurement result

You can view Linked Measurement data on a measurement record accessed through the **Historical Tab** or a **User Profile** page.



Measurement Surveys

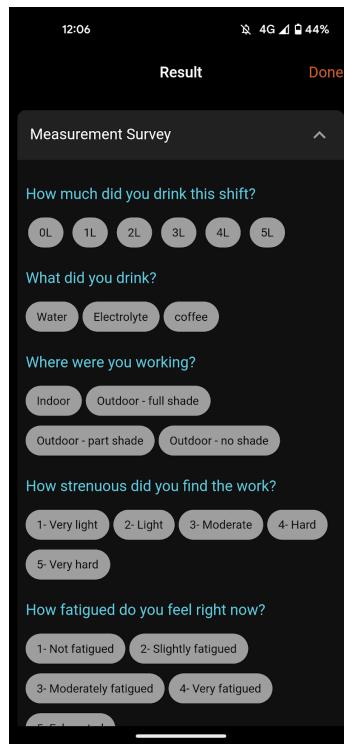
Measurement Surveys are like Linked Measurements but offer additional flexibility in the type of data that can be recorded.

When a Measurement Survey is active for an organization, users are presented with a list of questions after a Hydration Measurement.

Responses to a Measurement Survey are paired with a hydration measurement result and can be viewed in the MX3 App and MX3 Portal

Survey questions can be one of the following types

- Text field – e.g. “Where are you currently located?”
- Number – e.g. “How much did you drink this shift in mL?”
- Options (select one) – e.g. “How fatigued do you feel right now?”
- Multi-select choices (select all that apply) – e.g. “Are you experiencing any of the following symptoms?”



Measurement Surveys are set up using the MX3 Portal.

For more information about setting up Measurement Surveys, see the [Portal User Guide](#).

Editing/Deleting Measurements

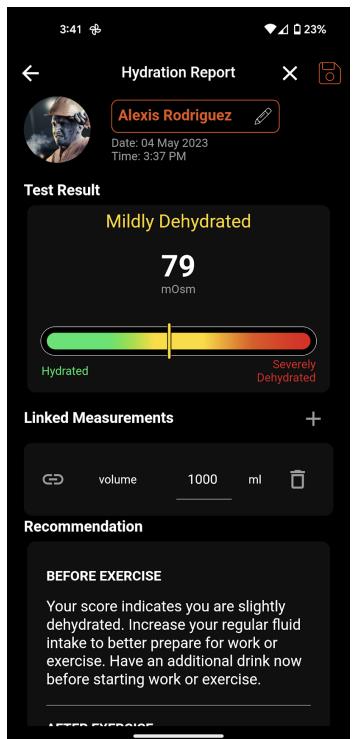
To edit/reassign a measurement:

1. Go to the Historical Tab
2. Tap  next to the desired measurement to open the detailed record.
3. Tap on the 
4. Modify the measurement as desired. To reassign a measurement, tap the  next to the user's name and select the desired user.
5. Tap on the 

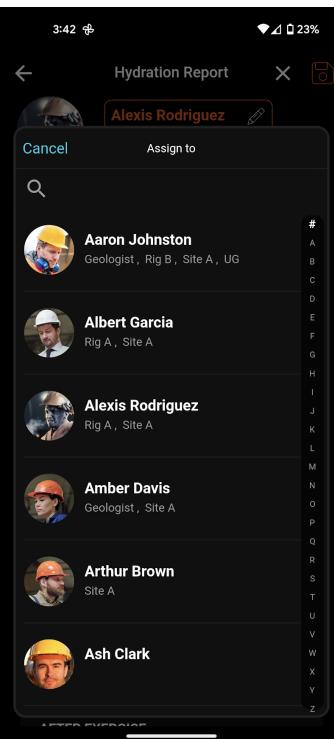
To delete a measurement:

1. Go to the **Historical Tab**
2. Tap  next to the desired measurement to open the detailed record.
3. Scroll to the bottom of the measurement record and tap **Delete this measurement**
4. Tap **Yes**

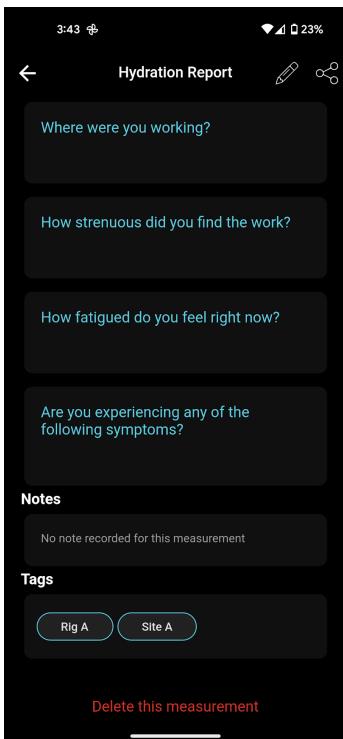
Edit Measurement



Reassign Measurement



Delete Measurement



Syncing Local Mode Data

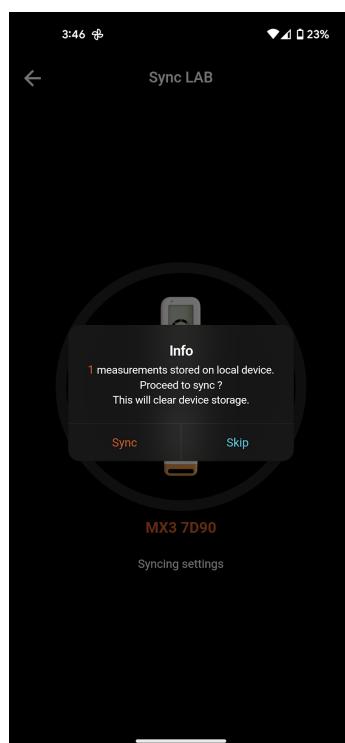
The MX3 LAB may also be used in LOCAL mode to take measurements without the MX3 App.

To take a measurement in LOCAL mode, turn on the MX3 LAB, scroll to highlight LOCAL, press **Select** and follow the process for taking a hydration measurement. The reading and hydration assessment will be displayed on the screen.

LOCAL mode measurements are stored on the MX3 LAB and can be later assigned to a specific user using the MX3 App or MX3 Portal. To assist with assigning LOCAL measurements we suggest you use the recording template located at the end of this document.

To sync stored LOCAL mode measurements with the MX3 App

1. Go the **Settings Tab**
2. If necessary, pair your MX3 LAB with the MX3 App by pressing the **Pair** button and following the prompts .
3. Tap **Sync LAB**
4. If local measurement data is present you will be presented with the number of measurements. Select **Sync**.



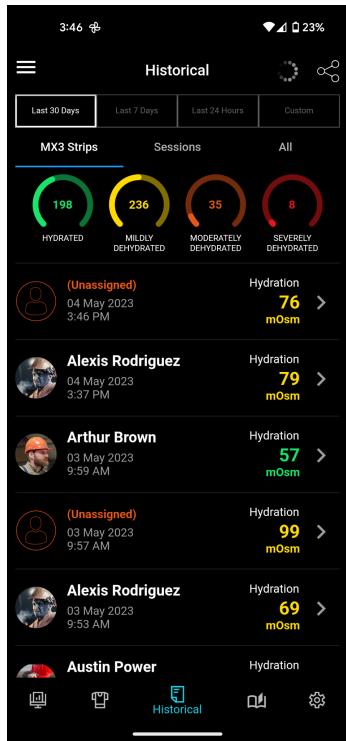
To assign LOCAL mode measurements with the MX3 App

Synced measurements will appear in the **Historical** tab as **(Unassigned)**.

To assign a measurement:

1. Go to the **Historical** Tab
2. Tap on the  next to the desired measurement to open the detailed record.
3. Tap on “Assign to User” 
4. Select the desired user
5. Tap on the  icon

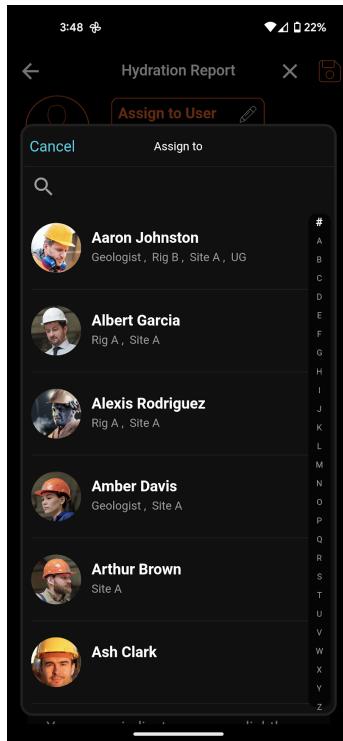
Historical Tab



Edit Measurement



Assign User



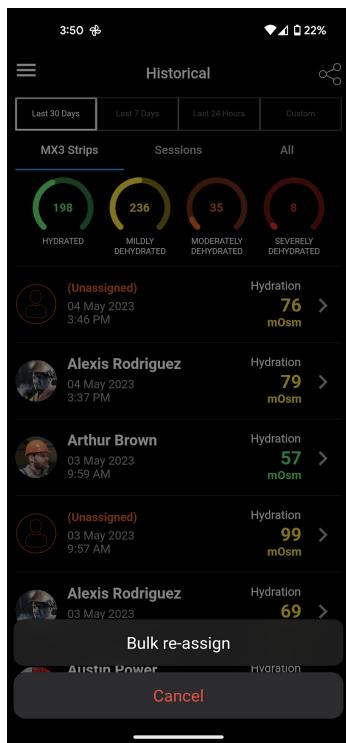
Re-assign multiple measurements at once (Bulk-Reassign)

Multiple measurements may be re-assigned at a time using the Bulk Re-assign tool.

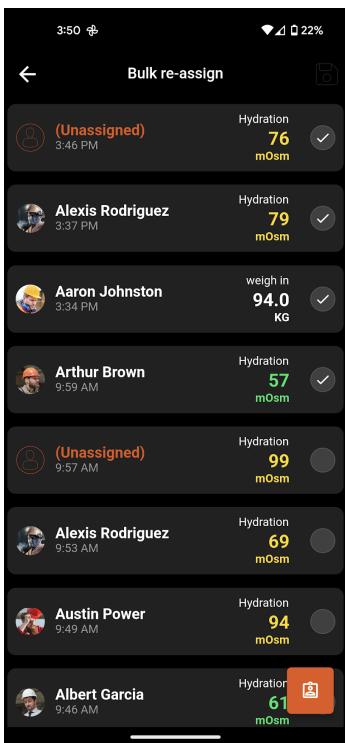
To bulk re-assign measurements

1. Go to the **Historical Tab**
2. Tap  Tap in the top left, then tap **Bulk re-assign**
3. Select the measurements you would like to reassign and tap the  icon
4. Select the user you would like to assign the measurement to
5. Repeat this process until all desired measurement have been re-assigned
6. Tap on the  icon

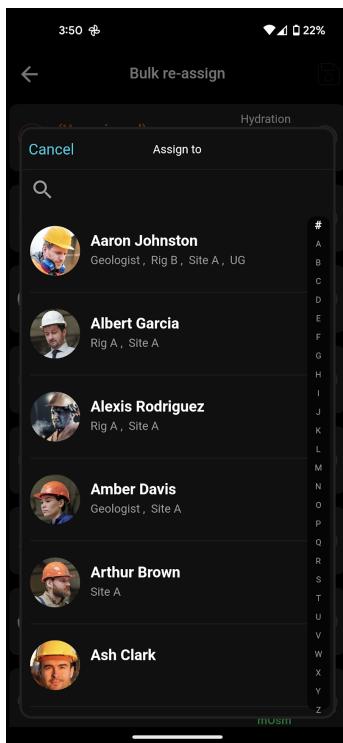
Historical Page Menu



Bulk Reassign



Assign User



Baseline Measurements and the OHZ

Baseline measurements are measurements conducted on a user in a well hydrated state.

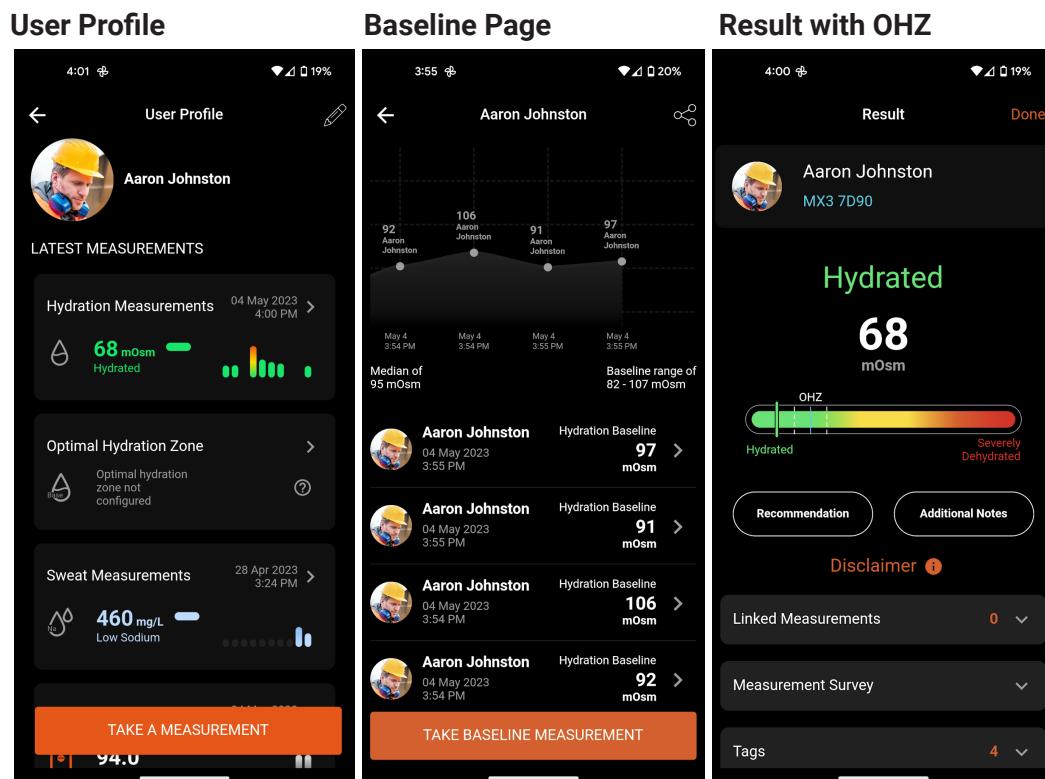
An example protocol for collecting baseline measurements can be found below. If following our suggested hydration protocol is not feasible, a trainer or supervisor may choose instead to define readings as baseline measures when they feel water consumption has been adequate to achieve a fully hydrated state.

Once 6 measurements have been conducted, the MX3 App will calculate a user's optimal hydration zone (OHZ), a range corresponding to when they are fully hydrated. If you conduct more than 6 baseline measurements, only the most recent 6 will be used to determine a user's OHZ and baseline.

A user's OHZ is also displayed on the results bar after taking a hydration measurement. Baseline values are also used to customize hydration status threshold values.

To conduct a baseline measurement:

1. Go to the **Users Tab**
2. Tap the name of the desired user to open their **User Profile**
3. Tap on the  next to **Optimal Hydration Zone**
4. Tap **Take Baseline Measurement**
5. Follow the prompts to conduct a hydration measurement.



Example Baseline Protocol

Day 1

- Consume 1 standard glass of water (250 ml) every hour from 9/10am to 5/6pm in addition to any water typically consumed during or after work/exercise.
- Limit alcohol consumption (1 standard drink) to avoid alcohol related dehydration affecting baseline readings.

Day 2

- Consume 1 standard glass of water (250 ml) every 45 mins from 9/10am to 5/6pm in addition to any water typically consumed during or after work/exercise
- We recommend conducting baseline measures on days where exercise is light to minimize exercise related dehydration increasing baseline readings
- We recommend not to consume any alcohol to avoid alcohol-related dehydration effects.
- Avoid eating or drinking 15 minutes before taking a baseline measurement.
- Take 3 baseline readings at 12pm and 3 baseline readings at 5/6pm.

Updating the MX3 LAB Firmware

For a video demonstrating how to conduct a firmware update see
<https://www.mx3diagnostics.com/fw-update>

To update your MX3 LAB to the latest Firmware Version:

1. Go to the **Settings Tab**
2. Tap **Firmware Update**
3. Tap **Next**
4. Turn on your MX3 LAB and select App Mode
5. Tap the MX3 LAB you would like to update
6. Tap **Next**
7. Wait for the update to complete. Your MX3 LAB will automatically reboot once it has finished updating.

Do not turn off the LAB until it has rebooted.

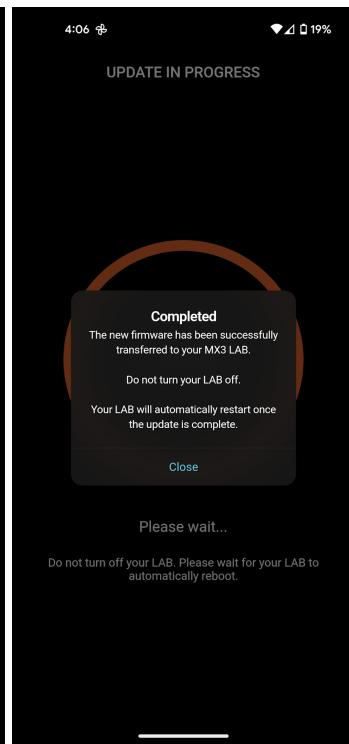
FW Update



Update (in progress)



Update (Complete)



LOCAL Mode Recording Template

Operator:

Page ____ of ____

MX3 LAB ID:

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