

i4M

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***Chaser Bin Monitor
User Guide***

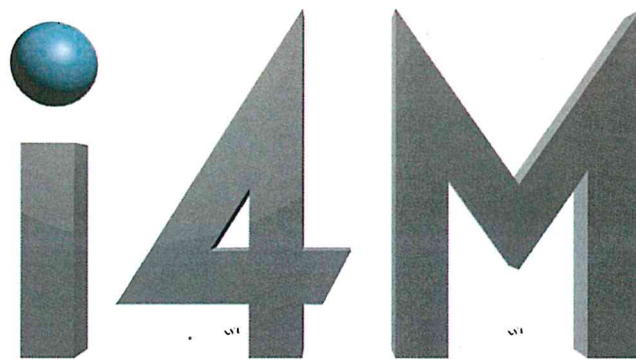


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Connectivity

The tablet running the i4M Chaser Bin Monitor app must be connected to the i4M Chaser Bin Controller over Wi-Fi. To do this:

1. Power up the i4M Chaser Bin Controller.
2. After approximately 60 seconds, the i4M Chaser Bin Controller will begin emitting a Wi-Fi signal.
3. On the tablet, navigate to Settings -> Connections -> Wi-Fi. This will display a list of the available Wi-Fi networks.
4. Identify the i4M Chaser Bin Controller Wi-Fi network in the list and tap on it to connect. No password is required to connect. By default, this Wi-Fi signal is named "MACHINE WIFI". However, in some circumstances this name may be different.

If you are unsure which Wi-Fi network is correct:

1. Power down the i4M Chaser Bin Controller.
2. On the tablet, navigate to Settings -> Connections -> Wi-Fi. This will display a list of the available Wi-Fi networks.
3. Take note of the available Wi-Fi networks.
4. Power up the i4M Chaser Bin Controller.
5. After approximately 60 seconds, the i4M Chaser Bin Controller will begin emitting a Wi-Fi signal.
6. A new Wi-Fi network will be available on the tablet. This is the i4M Chaser Bin Controller Wi-Fi network.

Main Menu

The i4M Chaser Bin Monitor app main menu is shown in the figure below. This is the opening screen of the app.

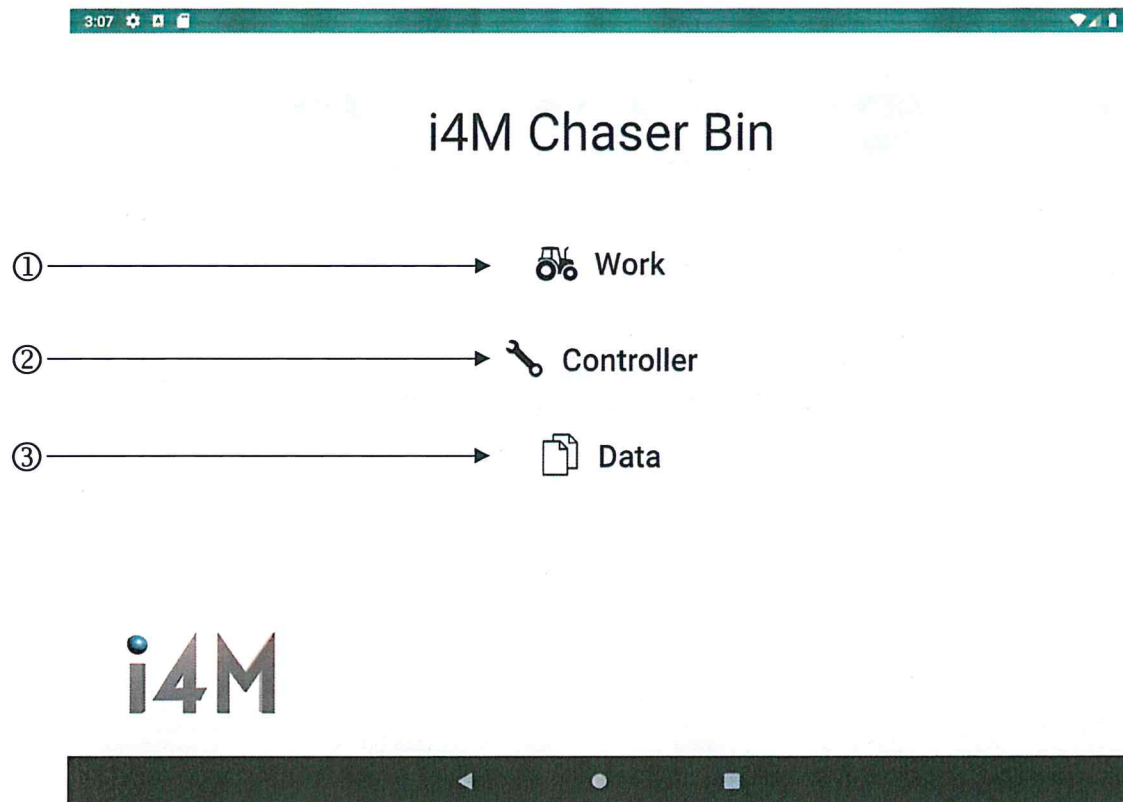


Figure 1. Main menu

- ① – Work button. Tap this button to navigate to the work screen. This is used for data logging and work operations.
- ② – Controller button. Tap this button to navigate to the controller screen. This will connect to and open the i4M controller web pages, for machine calibration and diagnostics.
- ③ – Data button. Tap this button to navigate to the data screen. This is used for data management and server login.

Controller

To navigate to the controller screen, tap the Controller button on the main menu. This will open the i4M Chaser Bin Controller web pages. The tablet must be connected to the i4M Chaser Bin Controller Wi-Fi network in order to display the web pages. These web pages are used for machine calibration and diagnostics. The controller screen is shown in the figures below.

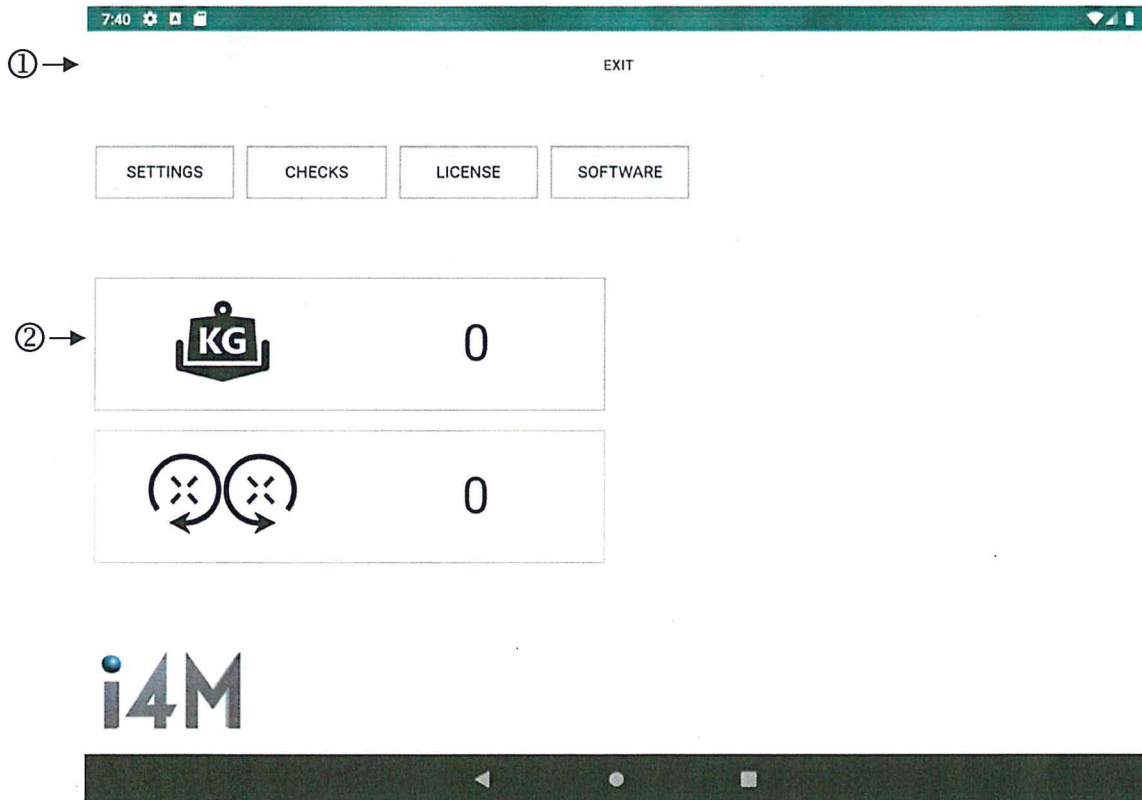


Figure 2. Controller screen 1

- ① – Exit button. Tap this button to return to the app main menu screen.
- ② – Weight display. Tap this to calibrate the loadcells.

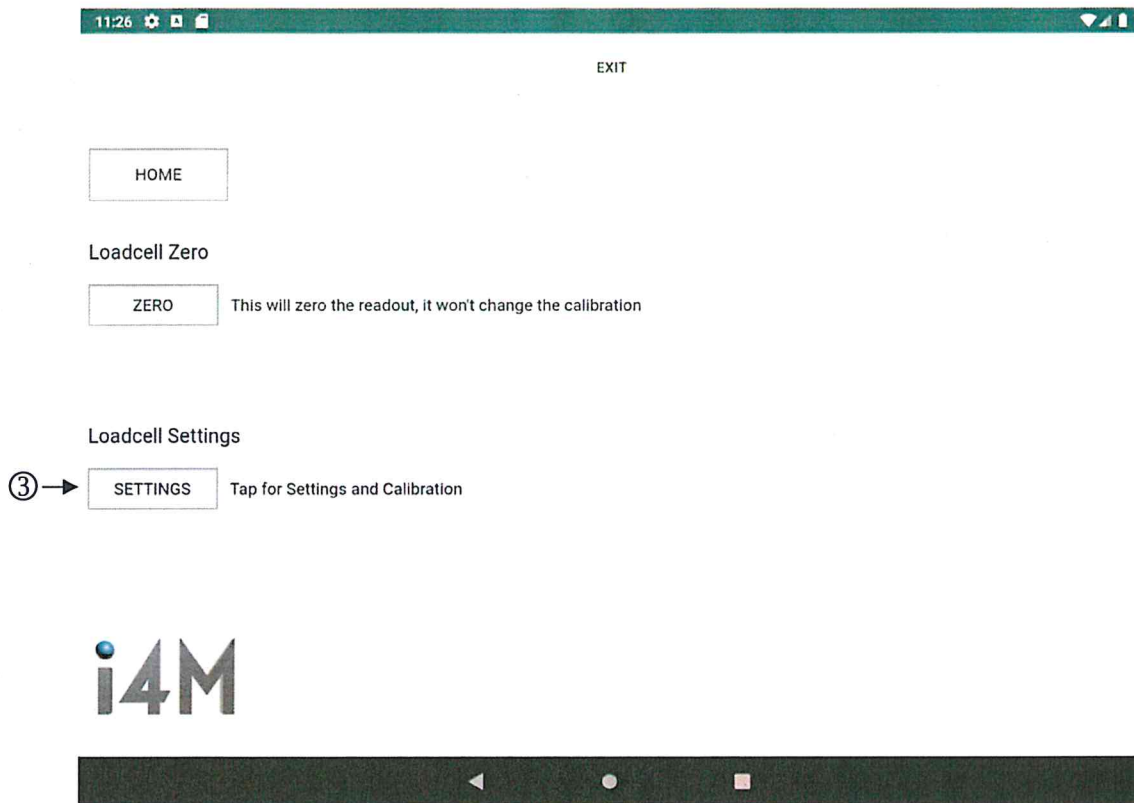


Figure 3. Controller screen 2

③ – Settings button. Tap this button to display the calibration setting options.

④ →

Loadcell Zero

This will zero the readout, it won't change the calibration

Calibrate Loadcells

⑤ → Tap this when the hopper is empty

⑥ → kg When there is product in the hopper, enter the kilograms

Use The Factory Calibration

Reset loadcells to the factory calibration

Loadcell Settings

⑦ → Weight tracking - time based variable incremental follower

⑧ → Input channel 0

Input channel 1

Input channel 2

Input channel 3

Turn off unused channels



Figure 4. Controller screen 3

- ④ – Home button. Tap this button to return to controller screen 1.
- ⑤ – Empty button. Calibrates the empty value for the loadcells.
- ⑥ – Calibration weight entry field. Calibrates the loadcells for a known weight.
- ⑦ – Filter button. Tap this button to cycle through the available filters. Use weight tracking or moving average filter.
- ⑧ – Input channel buttons. Tap these buttons to toggle on or off the loadcell input channels. For machines with 3 loadcells, turn on the first 3 channels. For machines with 4 loadcells, turn on all 4 channels.

To calibrate the loadcells:

1. When the machine is empty and on level ground, tap the Empty button.
2. Load the hopper with a known quantity of product.
3. Tap the calibration weight entry field and enter the known weight.
4. Check the calibration by tapping the home button and viewing the weight display on controller screen 1.

Work

To navigate to the work screen, tap the Work button on the main menu. This is used for data logging and work operations. The work screen is shown in the figure below.

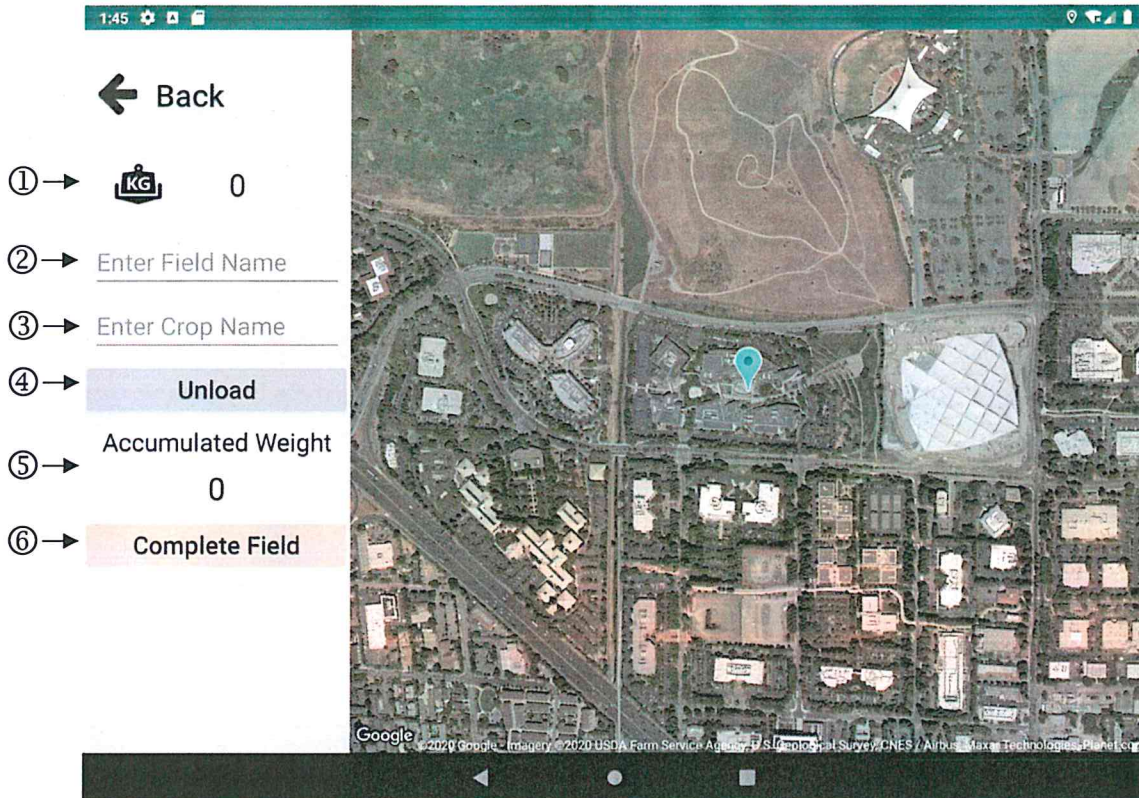


Figure 5. Work screen

- ① – Weight display. The current chaser bin weight is displayed here.
- ② – Field name entry text field. Enter your custom field name here.
- ③ – Crop name entry text field. Enter your custom crop name here.
- ④ – Unload button. When this button is tapped, the current weight in the chaser bin (as shown by the weight display) is added to the accumulated weight. Each time the chaser bin is about to be unloaded, tap this button.
- ⑤ – Accumulated Weight display. Displays the current accumulated weight.
- ⑥ – Complete Field button. When this button is tapped, the field name, crop name, accumulated weight, timestamp and user location will be written to a data log file within the app. It will also clear the field name entry text field, crop name entry text field and accumulated weight, so that a new logging session may be started. When harvesting of the field has been completed, tap this button.

Data

To navigate to the data screen, tap the Data button on the main menu. This is used for data management. The data screen is shown in the figure below.

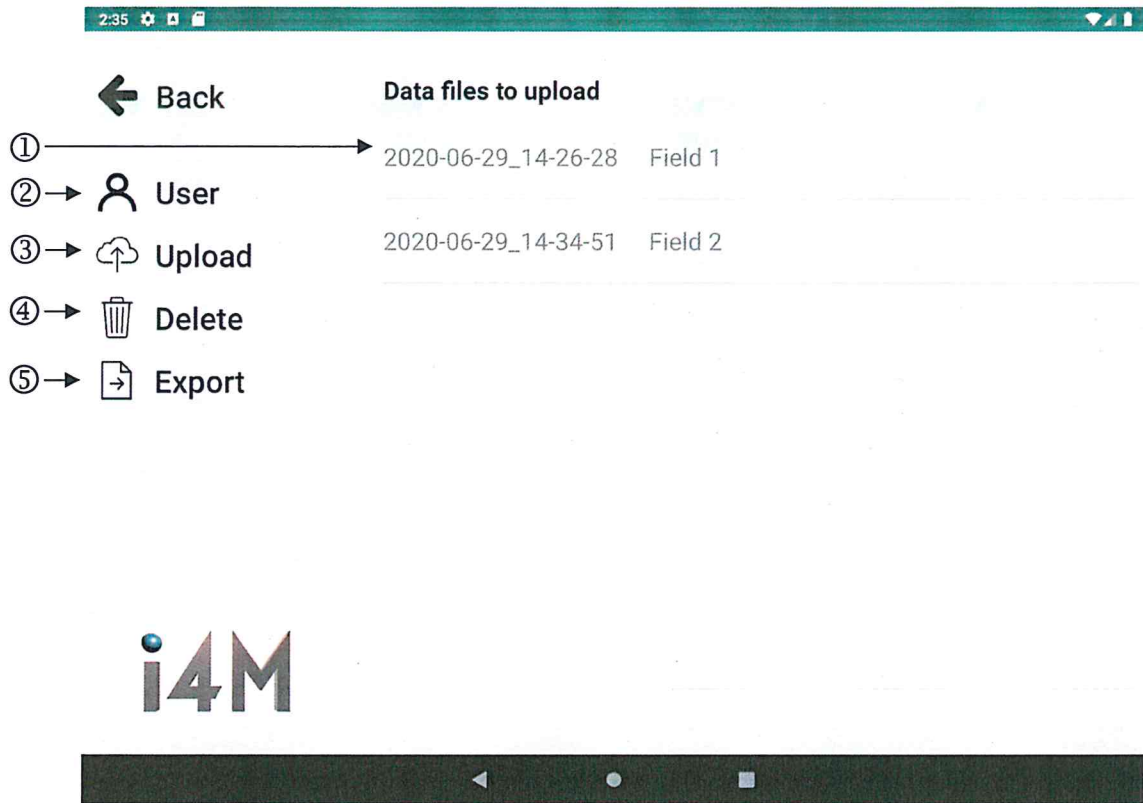


Figure 6. Data screen

- ① – Data log files list view. This list displays the data log files currently stored in the app. It displays the timestamp (in YYYY-MM-DD_hh-mm-ss format) and field name of each data log file. To inspect the contents of a data log file, simply tap on it in the list view.
- ② – User button. Tapping this button will navigate to the user screen, where i4M user credentials may be entered. This must be done before uploading data log files.
- ③ – Upload button. When this button is tapped, all data log files will attempt to be uploaded to the i4M server. The tablet must be connected to the internet for upload to be successful. This can be either through a cellular connection or over a Wi-Fi network.
- ④ – Delete button. Tapping this button will delete all data log files from the app.
- ⑤ – Export button. Tapping this button will export all data log files to the Downloads directory of the tablet. This may be used if the user wishes to access the data without uploading to the server.

User

To navigate to the user screen, tap the Data button on the main menu, then tap the User button on the data screen. This is used for server login. The user screen is shown in the figure below.

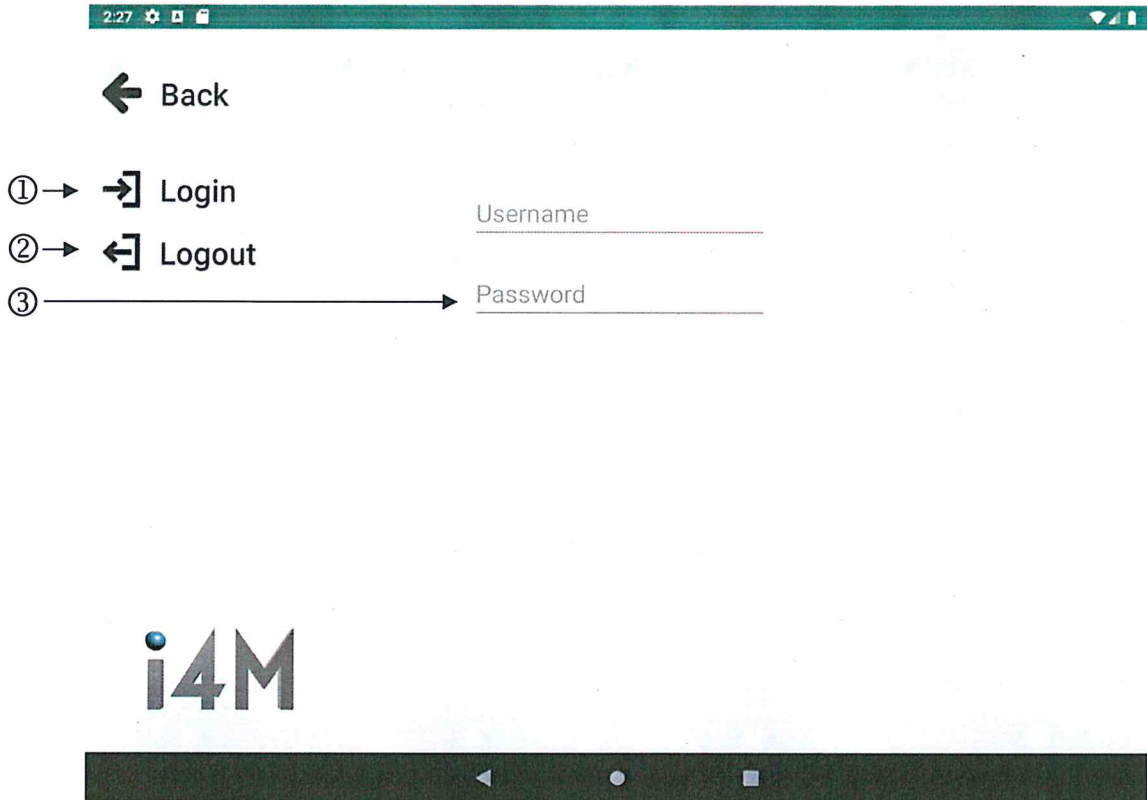


Figure 7. User screen

① – Login button. Tapping this button will store the user credentials that are currently entered in the Username and Password text entry fields. Tap this button after entering your i4M user credentials into the Username and Password entry text fields.

② – Logout button. Tapping this button will clear the stored user credentials.

③ – Username and Password entry text fields. Enter your i4M user credentials here and then tap the Login button.