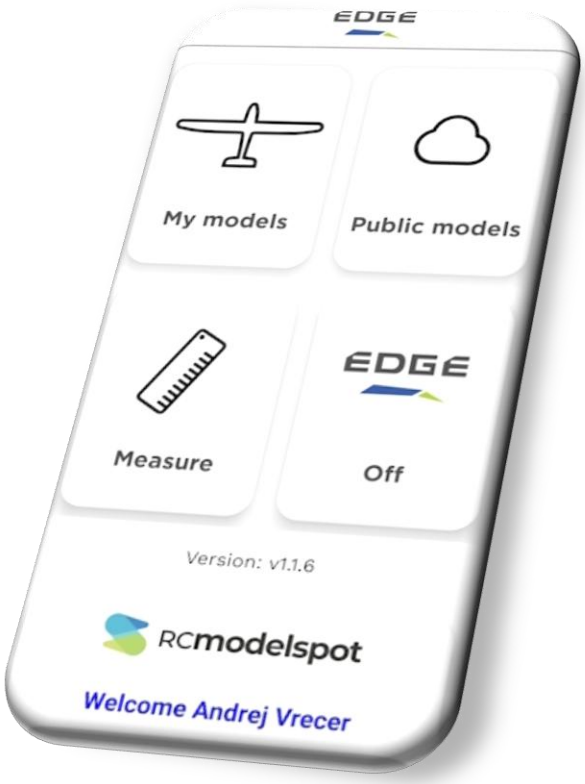
EDGE application

Application for setting up R/C model throws



Manual version: 1.0

RC Electronics
support@rc-electronics.eu; http://www.rc-electronics.eu

Contents

Links to the application

Android support only!
At the moment there is no iOS application!

SCAN ME

https://play.google.com/store/apps/details?id=eu.rc.electronics.edge

Introduction

The application helps users quickly and accurately set up their R/C model throws using the EDGE product from RC Electronics (https://www.rc-electronics.eu/product/edge/).

Users can add personal notes and store all throw settings for each flight phase and control mode, whether global or specific to a particular flight phase.

Modes of operation:

- Free
- Yearly "EDGE PRO" subscription based (subscription is paid via www.rcmodelspot.com) platform where user creates his profile.

Main differences are:

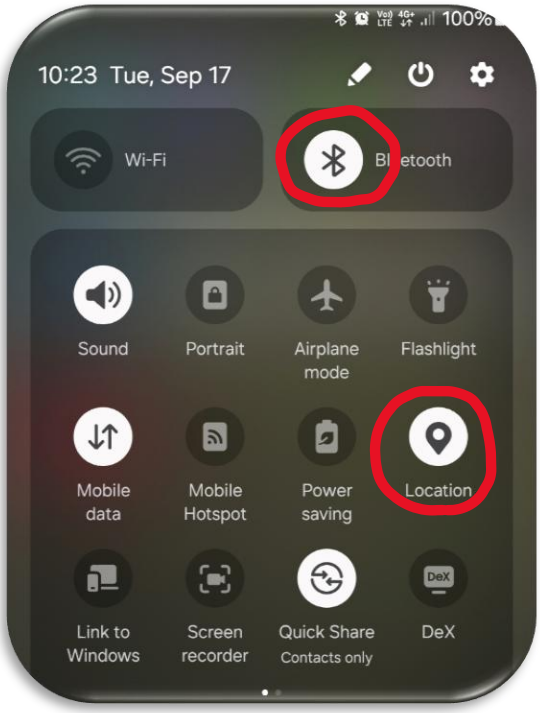
	Free	Subscription based
View / usage of public model data	✓	✓
Setting of throws in deg or mm (chord length needed)	✓	✓
Max throws information in all flight phases info	✗	✓
Graphical presentation of left/right throws	✗	✓
Nr of Edge sensors supported (measure or model mode)	1	4
Nr of models saved locally	1	unlimited
Nr of models synced to RCmodelspot repository	1	unlimited

Key features

- Personal model repository which is synced to www.rcmodelspot.com cloud
- Public models repository for easier setting up of production models
- Fast and accurate setting of model throws using up, down and ok arrows
- Graphical presentation of throws
- Multi EDGE sensor support (up to 4)
- Multi language support

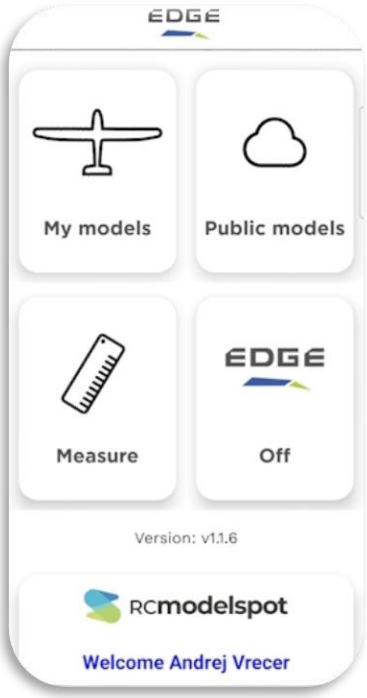
Important facts to know

For Android users: Since the app uses a BLE (Blue Tooth Low Energy) communication, user must allow fine location permission. User must enable BT module and enable location service. If all are not enabled, then BLE communication will not work!



Using the application

After running the app main screen comes up. If there is a new version available on Google Play store, app will inform user on main menu every time app is opened.



My models:
User can find a list of his own models and select one to see throws, mixes and model data and use it to fine tune, correct or change anything on the model.

Public models:
There is a list of public models that the user can use to set his model to setting as recommended by the manufacturer.

Measure:
Quick and simple measure menu to measure throws.

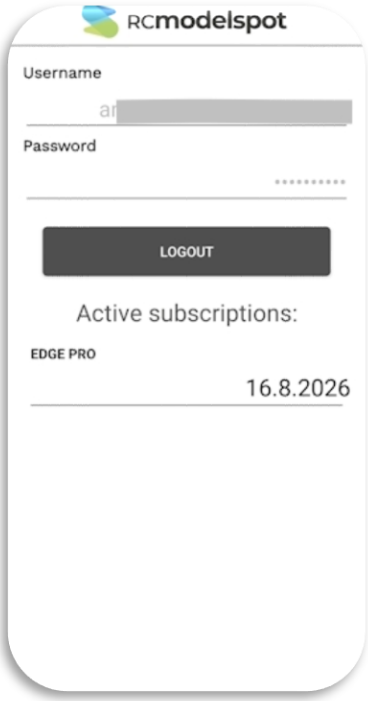
EDGE logo:
Indication of number of detected Edge devices. If there is newer version available for EDGE sensor module, update button will appear here.

RCmodelspot:
Login settings to link the app with user www.rcmodelspot.com account

RCmodelspot setting

Cloud Integration and Account Options

Even though this option appears last in the menu, let's start with it. The **EDGE** app is connected to the **www.rcmodelspot.com** cloud service. This cloud service allows you to store your model data online and automatically sync it between your Android devices if you use more than one for setting up your models.



Using EDGE in Free Mode

You don't need an account on **www.rcmodelspot.com** to use the free version of the app. In this case, your model setting is stored locally on your device. Keep in mind that if you uninstall the app, your local data will be lost. However, if you'd like to keep your model data safe even in free mode, you can choose to store your models in the **RCmodelspot** cloud. This way, your data remains available if you uninstall and later reinstall the app.

Using EDGE in Subscription Mode

To use **Subscription Mode**, you'll need an **RCmodelspot** account. This is because your subscription is linked directly to your RCmodelspot account. Creating an account on **www.rcmodelspot.com** is free. Once your account is set up, you can purchase a yearly subscription and then log in to your account from the **EDGE** app using your RCmodelspot login details.

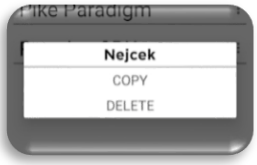
Checking Your Subscription

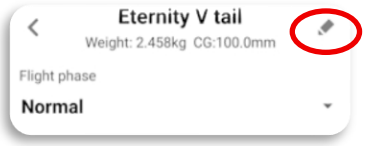
After logging into the app, you can easily see how long your **EDGE PRO** subscription is valid.

My models

When you open **“My models”**, the first thing you’ll see is a list of your available models. From here, select the model you want to view or configure. If no models are listed, tap **“Add new”** to create one and continue. In the **Free** version of the app, you can add only **one model**. In **Subscription Mode**, however, the number of models you can add is **unlimited**.

Pressing on an option icon (3 dots) will offer an option to copy the model or to delete it. Once deleted, it will be removed also from RCmodelspot cloud!

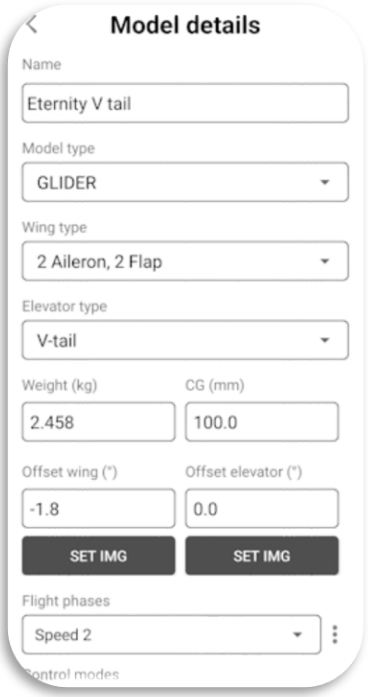




After selecting a model, the **Model View** screen will appear. This view displays the layout based on your current model settings. To open the **Model Settings**, tap the **Edit** icon located in the top-right corner of the screen.

My models settings

In model settings user can set model parameters like wing type, elevator tpye, model type and put in some information to display it in “Model view”.



Name

Set the name of the model. This name will be used in a “My models” list.

Model type

Select models type from the list. It will change model sillhouette in “Model view” in the future, at the moment only GLIDER type is supported.

Wing / Elevator type

Set wing type used on model (number of ailerons and flap servos). Set elevator type (1 / 2 controll or V-tail).

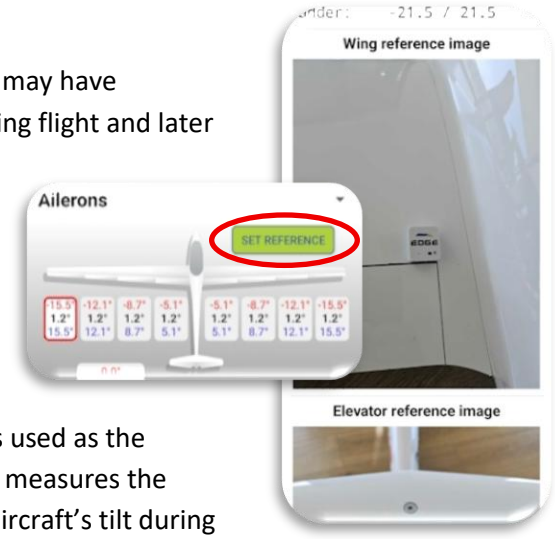
Weight / CG

Set the weight of the plane which is used when settings are made and at which CG. This is just reference info for the user.

Offset wing / elevator

This is a critical option which, when used correctly, significantly improves the accuracy and usability of the application and EDGE sensors, especially for future features. The main challenge when setting up a model is defining what truly represents a **0° flap or aileron position**. In other words, which flight phase should be considered the true 0° reference from which all other flight phases are derived?

On models with ailerons only, this is usually straightforward, as the aileron aligns with the fixed portion of the wing. However, on models where the flap runs all the way to the fuselage with no fixed wing section, defining 0° becomes problematic. Even on wings that do have a fixed section next to the flap, it is often unclear whether that section truly represents a 0° flap position or whether it already has some built-in deflection due to manufacturing tolerances.



Using a flap position as the 0° reference is also unreliable. Servos may have mechanical play, or trim adjustments may have been applied during flight and later forgotten, resulting in an incorrect reference and a misaligned wing setup. These challenges are exactly what the **Offset Wing / Elevator** function is designed to solve.

The core idea of the application design is to establish a **stable reference point on a fixed part of the wing or elevator**—a point that does not move during flight and is not affected by servo inaccuracies. Once the user selects such a point, it is always used as the reference by pressing **"SET REFERENCE."** Because the application measures the difference between two angles rather than absolute values, the aircraft's tilt during measurement does not affect the result.

After choosing the reference point, place the EDGE sensor there and use **"SET IMG"** to take a photo showing its location. This can be the same or a different point for the wing and elevator, depending on user preference. The photo serves as a reminder of the selected reference point.

Next, ensure that the current offset values are set to **0.0°**. Go to the **Model** view, place the EDGE sensor on the fixed reference point, and press **"SET REFERENCE."** Then move the EDGE sensor to the model's control surface at the user-defined 0° position (aileron or flap, depending on the model). The angle displayed now represents the required offset value for the wing or elevator.

For example, if the EDGE sensor shows **+1.8°** on the flap after setting the reference on the fixed wing section, the user should enter **–1.8°** as the wing offset. Once this is done, returning to the **Model** view will show **0°** when the EDGE sensor is placed on the model's true 0° control position.

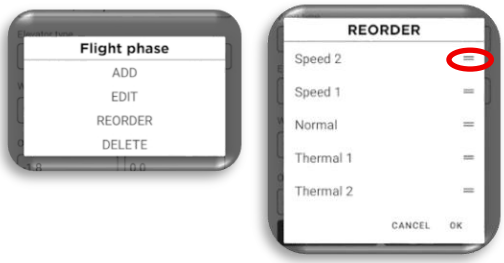
From that point forward, whenever the user wants to measure control throws or make adjustments, they simply place the EDGE sensor on the reference point, press **"SET REFERENCE,"** and then move the sensor to the control surface. All measurements will be accurate and repeatable.

This method also ensures consistency across multiple models from the same manufacturer. All models will share the same 0° reference position and identical flight phase deflections. One reference point is

used for all wing servos, and a separate reference point is used for elevator servos. On T-tail and X-tail gliders, the wing reference point may also be used. On V-tail models, however, the elevator reference point must be used, and the fuselage must be banked so the elevator is horizontal during measurement.

At any time during setup or measurement, the user can place the EDGE sensor on the reference point and press **"SET REFERENCE"** to re-establish the baseline.

Flight phases



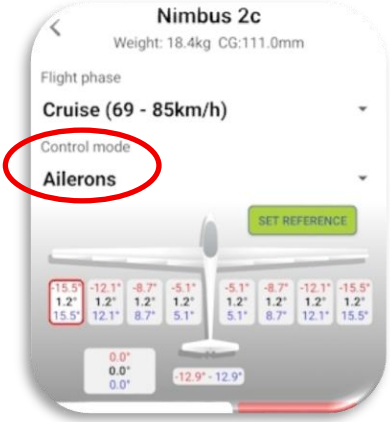
The list of flight phases in use. User can add/change/rename/sort flight phases.
Pressing an option button on flight phases will offer aditional options which are self explanatory. To reorder the flight phases, press and hold 2 line icon and drag it up / down on the list

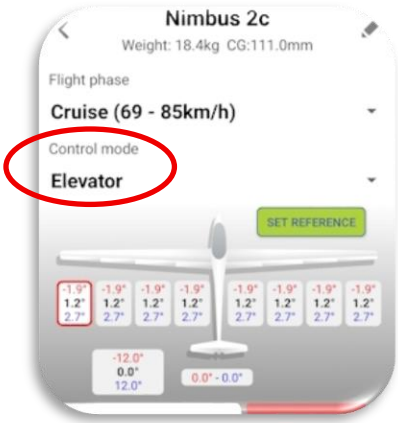
Control modes

Control mode is a control stick on user transmitter or a switch. Control mode is for example: aileron, elevator, rudder, gear, … Butterfly for example may be used as a global control mode which is only set once and same value is seen over all flight phases. User can add/change/rename/sort/add global control mode. Once control mode is set, user has option to set throws of that control mode in "Model view" and also set mixes with other controls.

For example,when Aileron control mode is selected, all of the wing control surface offsets are visible per flight phase setting along with their deflections up/ down (throws). If we are carefull we can also see how much aileron / Flap mix is used and how much aileron / rudder mixing is used. Each flight phase can have difrent throws and mixes for same control mode.

Picture on right says:
When user uses 100% of aileron stick, outer ailerons will deflect +-15.2°, inner ailerons for +-12.1°, outer flaps for +-8.7° and inner flaps for +-5.1°. At the same time rudder will deflect for +-12.9°





Next example (left picture) will show how much snap flap is used when user moves elevator: all wing goes up for 1.9°and down for 2.7° when user moves 100% of elevator stick, at the same time elevator makes +-12° deflection

Model view

In the **Model View**, you can use the app to configure your model or record the throw settings you currently use. Saving these throws allows you to easily apply the same setup to your next model.

Depending on your configuration, you'll see your **settings, flight phases, and controls** displayed at the top of the screen. In the center, you'll find the **throw values** for each control surface of your model (for example, two ailerons, two flaps, and a V-tail as shown in the image).

Below that, you'll see the **EDGE sensor live data**. In the example image, the background is green, meaning the EDGE sensor is successfully connected.

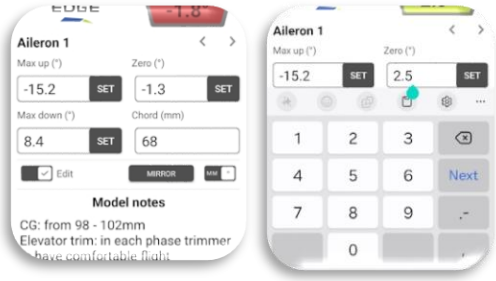
To switch between control surfaces, use the **<** and **>** arrows next to the control surface name, or tap one of the **gray bubbles** showing throw information. The selected control surface will be highlighted with a **red outline**, and its name will appear below the **EDGE** logo.

The next section displays the **throw values** in either **degrees (°)** or **millimeters (mm)**, depending on the unit selected with the **Units slider** located at the bottom of the screen.

When **Edit Mode** is turned **off**, the displayed values represent **relative deflections** from the 0° or 0 mm baseline as measured by the **EDGE sensor**.
Inside each **control bubble**, you'll see the **minimum and maximum** values relative to current **Flight Phase zero**.

In **Measurement Mode** (Edit Mode off), **arrows** appear to guide you while adjusting your throws. These arrows indicate whether the throw should be increased or decreased. Once a **green check mark** appears, it means the throw is correctly set within a ±0.2° margin.

In **Edit Mode**, you can adjust the current **minimum**, **maximum**, and **zero** control positions using the **SET** buttons, or manually enter values using the keyboard.



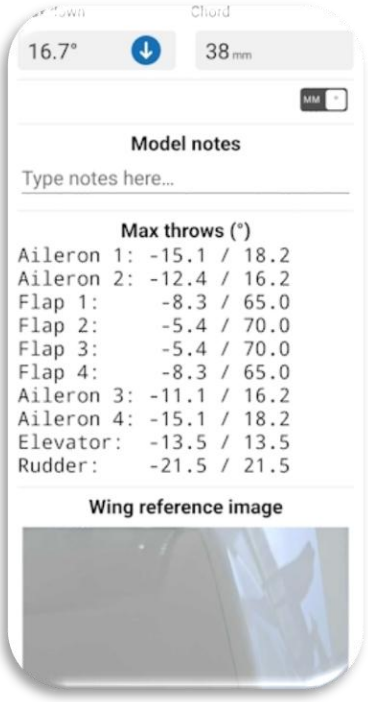
> **Note:**
> When Edit Mode is enabled, the values displayed in the fields are **relative to the current zero position**. These will automatically be converted to values relative to the **0 position of the EDGE sensor's reference data**.

While **Edit Mode** is active, **unit switching is disabled** — you cannot toggle between degrees and millimeters.

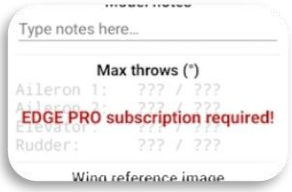
The **MIRROR** button also becomes available in this mode. By pressing **MIRROR**, the app copies your current control values to the corresponding mirrored control surface. For example, pressing MIRROR will copy the **left aileron** data to the **right aileron**, and vice versa.

The **Chord length** represents the length of the control surface. If the chord length is set to **0**, the throws will **not be displayed in millimeters**. Once a chord length value is entered, the throws for that control surface can be viewed in both degrees and millimeters.

Below the throws area user can find a notes area where user can write down any special notest which are stored to the model.



Then he can find max throws information. Max throws will be displayed in °or mm (depends on units setting). Max throw goes over all Flight phases and all controls and finds min and max throw for each control.



This information is visible only on "subscription" version. "Free" version has this information hidden.

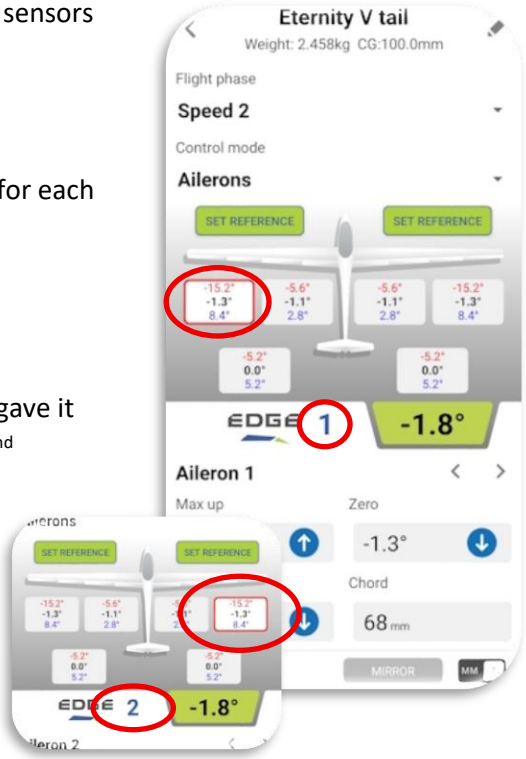
Wing and elevator reference images are dispalyed at the end so user knows where the reference point is.

Application will automatically take wing reference for all wing control surfaces and elevator offset for all elevator surfaces!

When user has "subscription" version he can use two EDGE sensors at the same time in "model" view.

Diference will be:

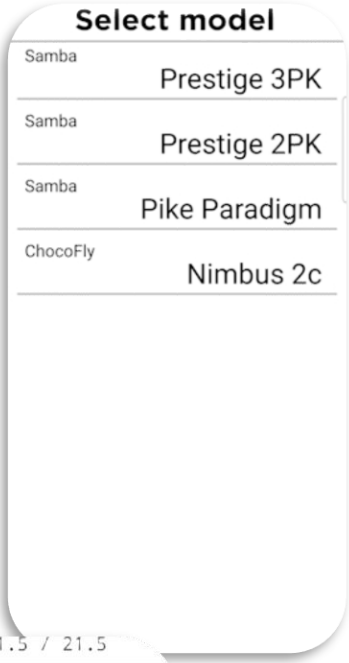
- Having left and right side SET REFERENCE button (one for each sensor)
- EDGE sensor ID will be shown in EDGE logo



Once application detects EDGE sensor it will automatically gave it the correct ID. So first detected sensor will have ID 1 and 2nd detected will have ID 2. The ID for the sensor is displayed with number of blinks on sensor (one blink or 2 blinks). Sensor ID 1 shoud be used on left side of model and on the controls which are only one (like elevator single servo and rudder). For all right sided control surfaces sensor ID 2 must be used.

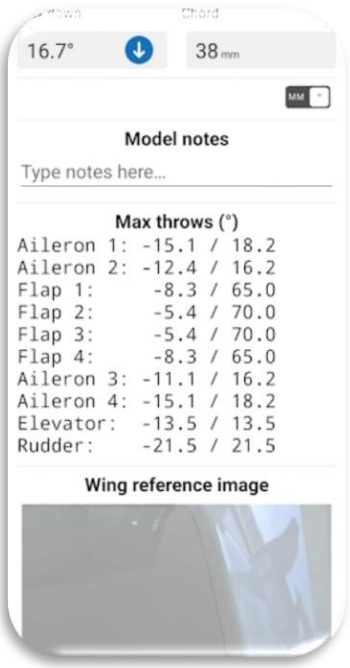
Public models

When you open **“Public Models”**, you’ll see a list of all available public model profiles. This list will continue to grow over time as more data becomes available. If you’re a model manufacturer, feel free to contact us at **support@rc-electronics.eu** — we’ll be happy to add your model to the list.

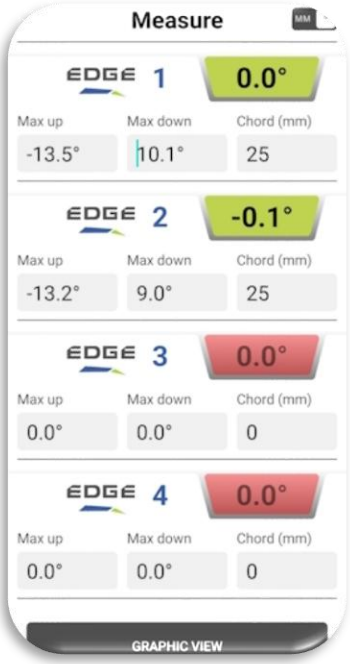


After selecting a public model, the view works the same way as in **“My Models”**, with one difference: public models **cannot be edited or changed**. You can use the data provided to fine-tune your own model or to review the throws and mixes used.

Because public profiles are read-only, the **Settings** icon and **Edit Mode** are disabled and hidden from view.



Measure



The **Measure View** is designed for quick and simple throw measurements.

In the **Free** version of the app, only **one EDGE sensor** is supported. The **Subscription** version, however, supports up to **four EDGE sensors** simultaneously.

To **set an EDGE sensor to zero**, simply tap on the sensor's **green live data field**.

If you'd like to display throws in **millimeters (mm)**, toggle the **units** setting in the top-right corner of the screen.

Note: To view throws in mm, you must enter the **chord length** of the control surface.
If the chord length is set to **0**, the app will display throws only in degrees (°).

Chord length values are saved temporarily and will reappear the next time you open Measure View. These values are **not linked to any specific model settings**.

To **temporarily save the minimum or maximum throw** from sensor data, tap the corresponding **Max Up** or **Max Down** value field — the current measurement will be stored there.

Revision history

January 2026	Initial release of user manual.