



RC Logger

User's Guide

Ver 1.03



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2 Prologue

RC Logger is an application designed to keep a total control of your RC planes, helicopters, keep a log of flights and a log the Batteries' use (Charges, discharges, status and condition).

The main features are:

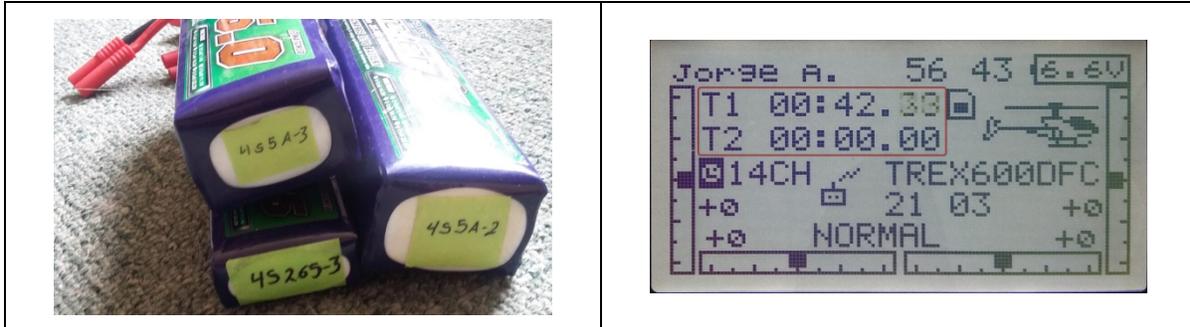
- List of models
- List of batteries.
- Flight log.
- Batteries log.
- Maintenance reminders.
- Expenses per model.
- To do list per model
- Local and remote (Dropbox) database backups.



3 Getting started

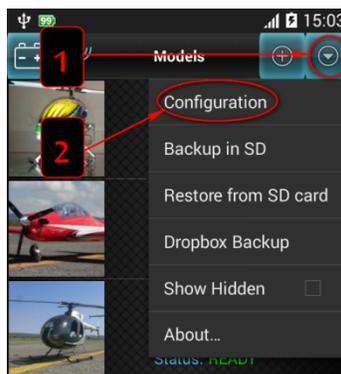
3.1 Before start

Before start using the App it is recommended to label all your rechargeable Batteries and acquire the habit of taking the flight-time after each flight.



3.2 Initial configuration

- 1) Click in the dropdown menu button on the top-right part of the screen.
- 2) Select "Configuration".



The options window will open and the follow options will be presented:

3.2.1 General

3.2.1.1 *Confirm before exit.*

When the checkbox is marked, the application will show a dialog window to confirm to exit y you press the back button () of your phone while you are in one of the main windows (Models or Batteries).



3.2.2 Date

3.2.2.1 *Date format*

Let you select if the first element of the date will be the day or the month.

3.2.2.2 *Year format*

Let you choose if the year is going to be 2 or 4 digits.

3.2.2.3 *Month Format*

Let you choose if the month is going to be a two digit number or three letters abbreviation.

3.2.2.4 *Date separator*

Let you choose the separator of the date. The available options are: diagonal bar (/); dash (-); period (.) or a space.

3.2.2.5 *Time format*

Let you choose if the time will be in 12 hour format or 24 hour format.

3.2.3 Currency format

Let you choose one of seven most used currency formats.

The currency formats will look as follows:

- \$ 5,676.00
- 5,676.00 \$
- 5 676.00 €
- 5.676.00 €
- € 5.676,00
- € 5,676.00
- £ 5,676.00

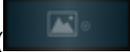
3.3 Batteries first!

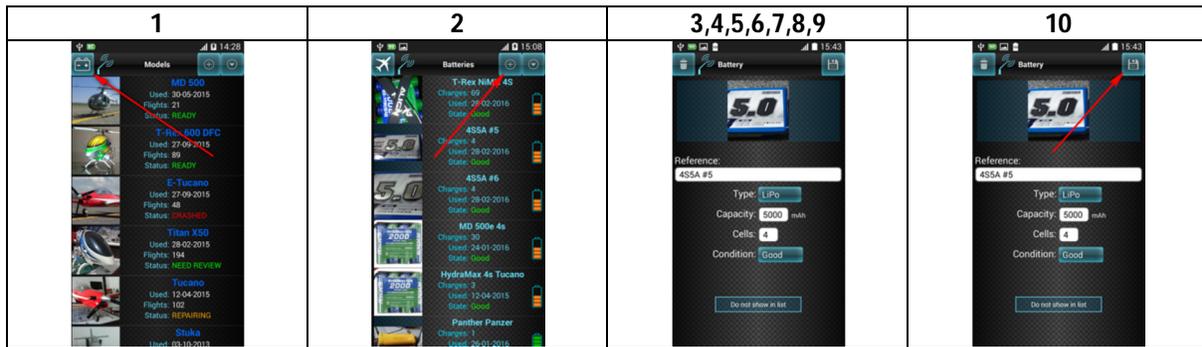
To make easier the data input flow, in your application is recommended that you insert first your Batteries and then your Models.



4 Batteries

4.1 Add

- 1) In the Models screen click the "Battery icon" ()
- 2) Click in the add icon ()
- 3) Take a representative picture of the Battery. Touch the picture area () to select the source of the picture.
- 4) Write the name of the gallery as you labelled it.
- 5) Choose the Battery type.
- 6) Set the Capacity of the Battery in mA (milliamperes).
- 7) Set the number of cells.
- 8) Choose the condition of the Battery.
- 9) Touch "Do not show in list" to hide or show the Battery in the main list.
- 10) Press the "Save button" ()



4.2 Modify or Delete

- 1) Select the Battery from the list.
- 2) In the status screen click the configuration icon () in the top-right corner of the screen.

4.2.1 Modify

- 3) Change the information on the fields.
- 4) Click the save button () in the top-right corner of the screen.

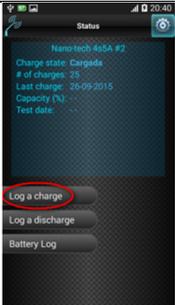
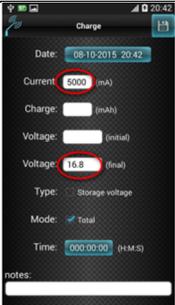
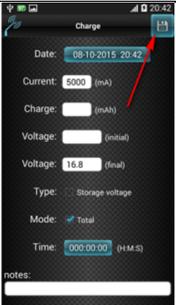
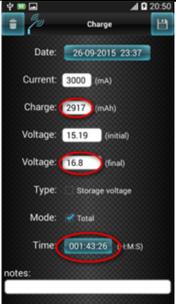
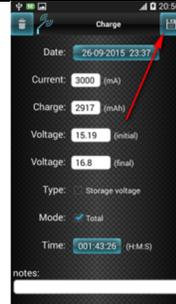
4.2.2 Delete

- 3) Click the Delete button () in the top-left corner of the screen.



4.3 Log a Battery charge

- 1) Select the Battery from the list.
- 2) In the Status Screen click on the button "Log a charge".
- 3) Type the initial voltage and the charge current (in milliamperes).
- 4) Click the "Save Button". (At this point you can end the application).
- 5) Wait to the charger to finish the charge.
- 6) Select the recent charged Battery from the list.
- 7) In the Status Screen select "Battery Log".
- 8) The log shows the records by date in descending order. The last event will be the first record of the list, Select it.
- 9) Complete the rest of the fields with the information provided by the charger.
- 10) Press the "Save Button" ()

<p>1</p> 	<p>2</p> 	<p>3</p> 	<p>4</p> 	<p>5</p> 
<p>6</p> 	<p>7</p> 	<p>8</p> 	<p>9</p> 	<p>10</p> 

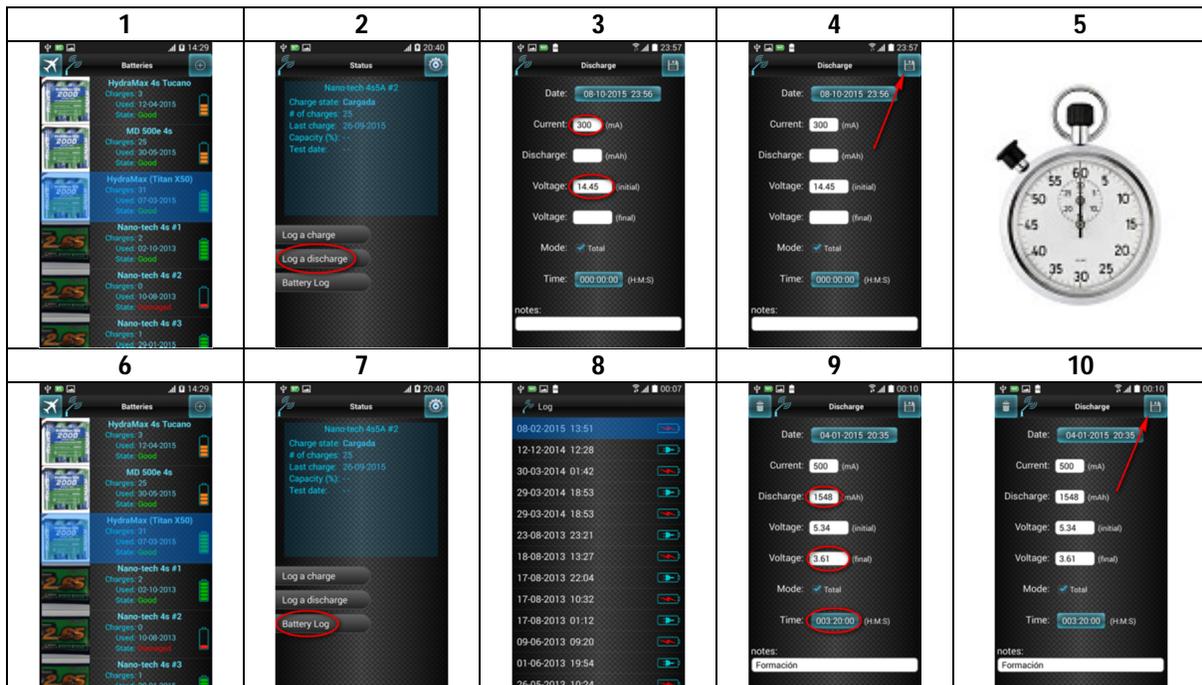


4.4 Log a Battery discharge

There are two ways to log a battery discharge: "Manual" and "Automatic". The manual form is by using an intelligent charger/discharger as a part of a cycling procedure and logs the resulting values. The Automatic form is by binding a Battery to a model and then log just the flight (The use of the battery will be logged automatically).

The following procedure describes the manual form. The Automatic form is explained in the section 5.1.1. ("Bind a battery and log a flight").

- 1) Select the battery from the list.
- 2) In the status screen click in the button "Log a discharge".
- 3) Type the current in mA (milliamperes) that will be used to discharge the battery and the initial voltage before start the discharging; as well as if the discharge is going to be "Total" or not. (Usually is not total when the battery is going to be left in the storage voltage).
- 4) Click in the Save Button (). (At this point you can close the application).
- 5) Wait until the charger finish the discharge.
- 6) Select from the list the Battery you just discharged.
- 7) In the status screen click the "Battery log" button.
- 8) The log shows the records by date in descending order. The last event will be the first record of the list, Select it.
- 9) Fill in the rest of the fields with the information provided by the charger.
- 10) Click in the Save Button ().

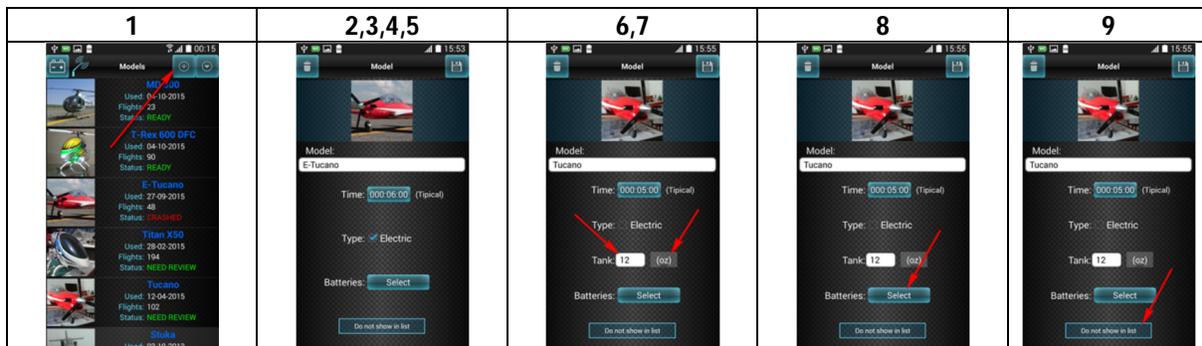




5 Models

5.1 Add

- 1) In the main screen (Models) click on the insert icon ()
- 2) Take a representative picture of the model. Tap in the picture area () to select the picture source (Camera or gallery).
- 3) Type the name of your model.
- 4) Set the typical flight time. This will be the default flight time for each flight for the model, and you can adjust it in each flight log.
- 5) Check if the model is electric or not.
- 6) In the case of being Gas or Glow type the capacity tank.
- 7) Tap on the state button at the right of the capacity field to indicate if the volume will be measured in oz. () or cubic centimeters () (cc).
- 8) Tap on the "Select Button" to bind or fix Batteries to the Model.
- 9) Tap on "Do not show in list" to hide the model from the main list.



5.1.1 Bind and fix Batteries to a Model

- 10) In the Batteries list you can simple select the Batteries that the model can use and also you can "fix" any Battery to the model.

What is the difference?

Tapping the state button () the first time will make the battery selectable for the model (). Tapping on it for the second time will bind the battery to the model so each time you log a flight you will be able to select these batteries.

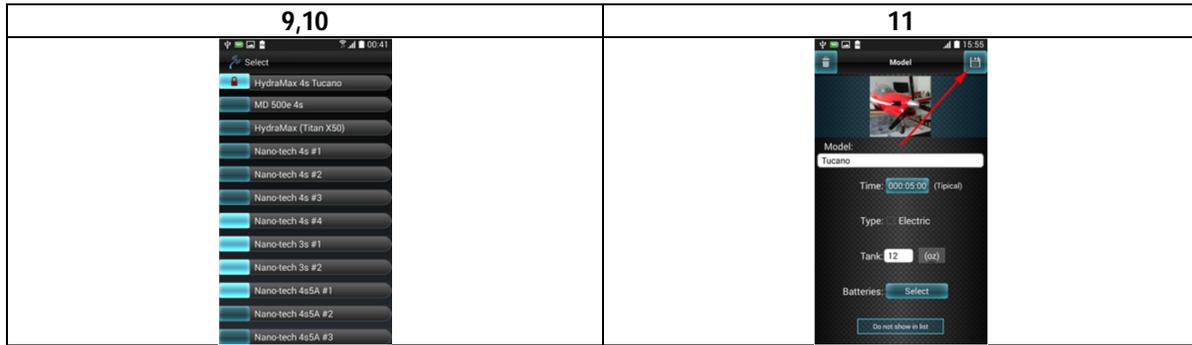
If you tap the state button a third time it will show a red padlock () meaning that the battery is fixed in the model. And it won't be necessary to select it when logging a flight. These batteries will have a discharge log at the same time a flight is logged.

By pressing the button when the red padlock is on, the state button will return to its off state ()

- 11) Once you have selected the batteries tap on the phone's back button ()



12) Click on the save button () in the models screen.



5.2 Modify or Delete

- 1) Select the model from the list.
- 2) Click in the configuration button () on the top-right side of the screen.

5.2.1 Modify

- 3) Change what you need.
- 4) Click on the Save button ()

5.2.2 Delete

- 3) Click in the Delete Button () located in the top-left corner of the screen.

5.2.3 5.2.3 Sort

- 1) Tap and Hold a model in the list.
- 2) While holding drag the model record to the desired position.
- 3) Release the finger from the screen.

6 Maintenance

The Application can show Maintenance warnings for each model, depending on the number of flights and/or the number of flight minutes and/or a number of natural days.
 The warnings will show each time the model's status window is opened and any of the three conditions are met.



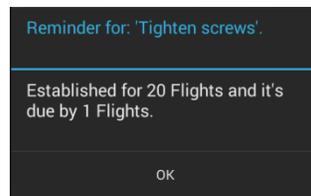
6.1 Add a Maintenance Warning

- 1) Select the Model from the list.
- 2) Click the Add Button next to the Maintenance Button (Maintenance).
- 3) Type the text of the notification in the field labeled "Title". This text will show in the warning popup window.

6.1.1 Configure the frequency of the notifications

- 4) Type the number of flights (if it is the case) and activate this warning by turning on the state button () at the right. The button will highlight () indicating that the notification is active.
- 5) Type the number of flight-minutes (if it is the case) and activate this warning by turning on the state button () at the right. The button will highlight () indicating that the notification is active.
- 6) Type the number of natural days (if it is the case) and activate this warning by turning on the state button () at the right. The button will highlight () indicating that the notification is active.
- 7) Type the maintenance description.
- 8) Press the Save Button () on the top-right corner of the screen.

6.2 What to do when a Maintenance notification is shown?



- 1) Click in the OK Button in the notification window.
- 2) DO THE MAINTENANCE. It's important! That's why you programmed it! Not doing it could lead to cause an accident to your model due to a "Mechanical failure".
- 3) Click in the maintenance Button (Maintenance), which will be blinking in red.
- 4) From the maintenance list select the one we want to renew the date.
- 5) Click in the renew button ().
- 6) Click in the Save Button ().





6.3 Modify or Delete a Maintenance notification

- 1) Select the model from the list.
- 2) In the Status window click in the Maintenance button ().
- 3) Select the notification from the list.

6.3.1 Modify

- 4) Change the required fields.
- 5) Click the Save Button ().

6.3.2 Delete

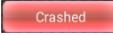
- 4) Click the Delete Button ().

6.4 Correct manually a reference date

Correct manually a reference date will make that the number of flights, flight-time and Natural days start count starting from the reference date.

It is useful when the maintenance of the model has been done but the date was not registered and flights have made after.

7 Log a flight

- 1) Have ready your chronometer.
- 2) Fly and have fun!
- 3) Select the model from the list.
- 4) In the status screen click in the Add Button next to the Flights Button ().
- 5) Click in the Time Button to set the time of the flight. It is recommended not to turn off your radio (with the flight time) or your chronometer until you have logged the flight. In the airfield it is easy to forget the flight times.
- 6) If the model crashed click in the Crashed state button ( .

7.1 Batteries used

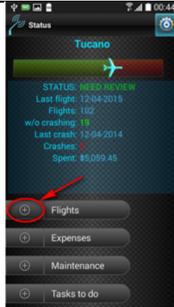
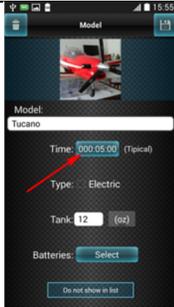
The selected Batteries will have a discharge log using the flight time as the discharge time. This will cause that the Charge state be "Used". According with this information you can decide to use it for another flight (if there is enough charge according to the time of use) or needs to be recharged.

When you fix a Battery to a Model ( HydraMax 4s Tucano) there is no need to select if to log the flight, it will be by default selected. But you can deselect it if you for some reason don't want to register the use of the battery. If you deselect it, it will be just for that flight as it is fixed to the model it will be selected again in when logging the next flight for the Model.

The Batteries that are shown in the list are those that were selected in the Batteries section of the Model. You can select one or more and all will have their respective discharge log, using the flight time as discharge time.



- 7) If it is the case select the Batteries by pressing the Batteries Button.
- 8) Press OK when you have finished selecting one or more batteries.
- 9) Type a flight note if it is there something you need to remember about that particular flight.
- 10) Press the Save Button () and the flight log will be completed.

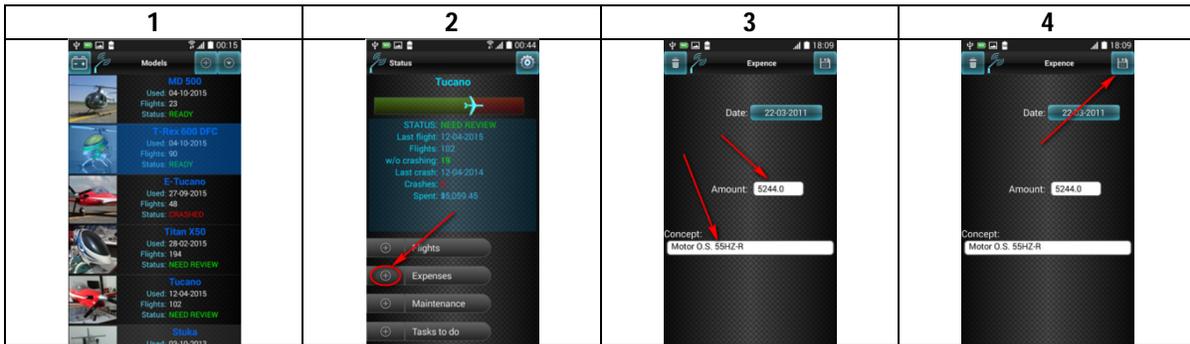
1	2	3	4	5
				
6	7,8	9	10	
				



8 Expenses

8.1 Register an Expense

- 1) Select the model from the list.
- 2) In the Model's Status Screen click in the Add Button next to the "Expenses Button" ().
- 3) Type the amount and the concept.
- 4) Click in the save Button ().



8.2 Modify or Delete an Expense

- 1) Select the Model from the list.
- 2) Click in the Expenses Button ().

8.2.1 Modify

- 3) Modify the information as needed.
- 4) Click in the Save Button ().

8.2.2 Delete

- 3) Click in the Delete Button ().

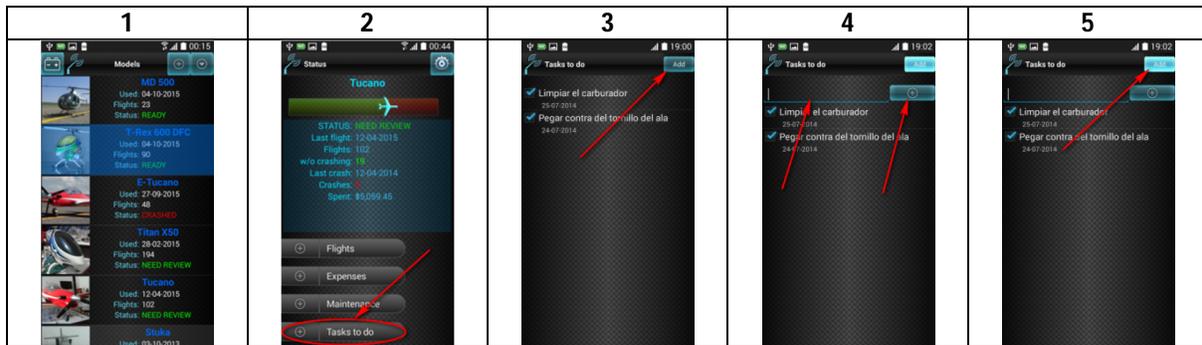
9 To do's list

The Tasks to do list is to remind us all those things we note we need to do to the model in the airfield. Is common to forget those when we don't write down them.



9.1 Add a Task

- 1) Select the model from the list.
- 2) In the Model's Status screen click in the add button next to the "Tasks to do" button ( Tasks to do).
- 3) Click in the Add state Button (). This will show an enter line for you to type the task to do.
- 4) Type the task and press the add button at the right of the enter line. This will add the Task you just wrote, clear the line and let you enter more tasks if needed, using the same process.
- 5) Click in the add state button again () when you have finished entering tasks.
- 6) Press the back button of your phone ().



9.2 Complete a task

- 1) Select the model from the list.
- 2) In the Model's Status screen click in the Tasks to do button ( Tasks to do (1)).
- 3) In the tasks list click in the checkbox next to the Task ( Clean the carburetor 30-09-2015) to mark it as "done".
- 4) Click in the Back button () of your phone.

9.3 Modify or Delete a task

- 1) Select the model from the list.
- 2) In the Model's Status screen click in the Tasks to do button ( Tasks to do (1)).
- 3) In the list CLICK AND HOLD in the checkbox. To open the Edit window.



9.3.1 Modify

- 4) Change what you need from the fields
- 5) Click in the Save Button ().



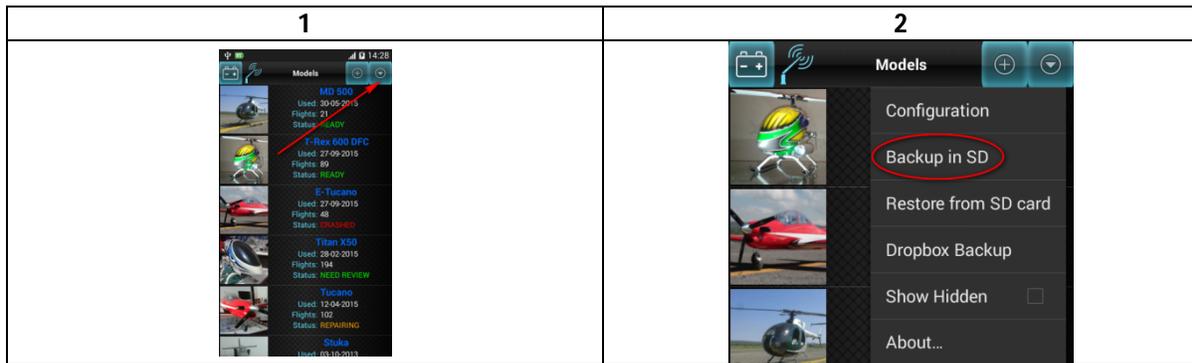
9.3.2 Delete

- 4) Click in the Delete Button ()

10 Backups

Backup in the SD Card

- 1) In the main window (Models) click in the Dropdown menu () at the top right corner of the screen.
- 2) Click in "Backup in SD".



10.1 Restore from the SD card



WARNING!



This command will replace your current database with a backup that could be outdated.

BE VERY CAUTIOUS TO EXECUTE THIS COMMAND. DO IT ONLY IF YOU ARE SURE WHAT YOU ARE DOING.

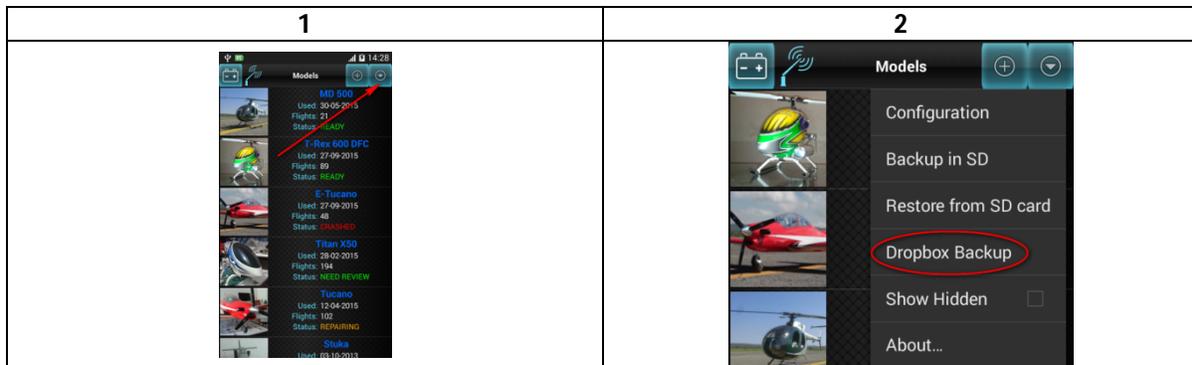
- 1) In the main window (Models) click in the Dropdown menu () at the top right corner of the screen.
- 2) Select the line "Restore from SD" card.



10.2 Dropbox

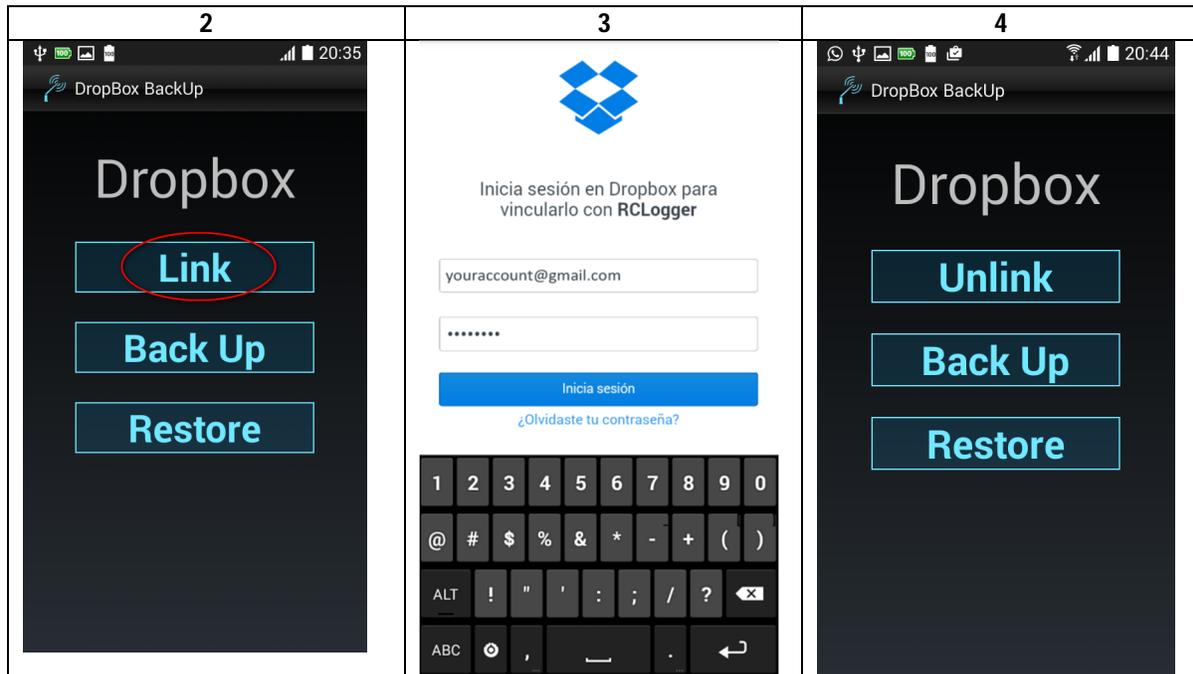
For this option is necessary to have a Dropbox account, if you don't have it you can get one for free in Dropbox official website (<https://www.dropbox.com/>).

- 1) In the main window (Models) click in the Dropdown menu () at the top right corner of the screen.
- 2) Select the "Dropbox Backup" line.



10.2.1 Link

- 1) Make sure you have internet access from your phone.
- 2) In the Dropbox screen click in the Link Button.
- 3) This will open the web browser and access the Dropbox authentication page. Type in your username and password.
- 4) After the authentication is successfully finished, you will see an "Unlink Button" instead the Link Button. **RC Logger** will remain linked to your dropbox account and you won't have to authenticate again until you click the Unlink Button.



10.2.2 Backup

- 1) Make sure there is access to internet on your phone.
- 2) In the main window (Models) click in the Dropdown menu () at the top right corner of the screen.
- 3) Select the line "Dropbox Backup".
- 4) Click the Button "Backup" and wait until the Backup is finished.
- 5) Tap in the Back button () of the phone.

10.2.3 Restore

WARNING!

This command will replace your current database with a backup that could be outdated.
BE VERY CAUTIOUS TO EXECUTE THIS COMMAND. DO IT ONLY IF YOU ARE SURE WHAT YOU ARE DOING.

- 1) Make sure you have internet access in your phone.
- 2) In the main window (Models) click in the Dropdown menu () at the top right corner of the screen.
- 3) Select the line "Dropbox Backup".
- 4) Click in the Restore Button. Wait until it is finished.



5) Tap in the Back button () of your phone.



11 Change History

Version 1.03

-Models list and batteries list are now Drag & Sort capable.

-When the "Storage voltage" checkmark is selected the following voltage are suggested:

Lipo 3.8v per cell.

LiFe 3.3v per cell.

Li-Ion 3.7v per cell.

NiMH 1.2v per Cell.

NiCd 1.2v per Cell.

NiZn 3.7v per cell.

-In the battery status the "Storage voltage charges" are not count as "charge".

-Models and Batteries can be hidden from their main list.

-The hidden models and batteries can be accessed by selecting "show Hidden" in the main menu.

-Taking the picture in models and batteries has been changed, and now can crop the taken picture from the camera.

-When a charge is set to storage voltage a different icon is shown in the charge history list.

-The cursor was not shown in recent android O.S. Now it is visible again.