Backing Up Your Roban X2 Flight Controller

If you are replacing servos, flight controllers, GPS units or doing any other maintenance on the helicopter, it is always good to backup your settings before making any changes. A back up of your settings is always a good thing to have in case something goes awry. To back up your flight controller settings, please follow the instructions below. You must first download Mission Planner software onto a computer to back up your settings. For more information on installing Mission Planner, please see the link below.

Installing Misison Planner (Windows)

IMPORTANT:

There are many settings and parameters that can be adjusted in this software. Use caution to follow these steps very carefully. Altering certain settings other than what is presented in this document, can render the helicopter unflyable or cause a crash. Please carefully follow ALL steps below as they are provided.

A full setting backup is specific to each flight controller and GPS unit (i.e. specific to each helicopter). Do NOT load this setting backup into another helicopter's flight controller and GPS system as it will not work and could render the helicopter unflyable.

1. Open Mission Planner on your computer.
    a. If any windows pop up asking about security/internet access, choose your desired settings. Internet access is not required for backing up your settings.
2. Connect the flight controller to your computer via the USB to USB-C cable.

3. Click the drop-down arrow in the top right corner of Mission Planner to select the appropriate COM (USB) port. You should see something like “COM8 ArduPilot (COM8)”. The port number may be different based on your individual computer. You’re looking for “ArduPilot” in the list. Select this option from the drop-down menu.

   If you don’t see this, it typically means that your computer is not recognizing the device. Possible causes:

   1. The cable you are using may not be a data transfer capable cable.
      a. Solution: Use a cable capable of data transfer.
   2. There may be a poor connection to the flight controller via the USB cable
      a. Solution: Check the connection of the USB cable to the computer and the flight controller. Ensure it is fully seated in both locations.
   3. There may have been an error when installing the program.
      a. Solution: Uninstall and reinstall the program



4. Click “Connect” in the top right corner. You should see some progress bars for the system loading various details.

   If any windows pop up and tell you there is a firmware update available, **DO NOT UPDATE THE FIRMWARE**. Click the “X” in the window notifying you of an update. Click OK through any other messages you may see.





5. Once connected, click the Config Tab at the top of the screen, followed by Full Parameter List.



6. On the right side of the screen, click the green button that says “Save To File”. This will open the file browser on your computer, and you can save the parameter file to your chosen location on your computer. We suggest naming the file in such a way that you’ll know what the file is. For example – RS_Bell206_Backup_3-25-2025.param
7. Once you have saved your file to the computer, you can click disconnect in the top right corner, and remove the USB cable.

