

VOLADOR VDX35

Getting started

BUILD GUIDE | Updated October 16, 2026



Illustrated cover. The photographs inside show the actual aircraft.

Your equipment

Volador VDX35 aircraft, configured DJI Goggles N3 and configured charcoal RadioMaster Pocket Crush. A **4S flight battery is required**. **No batteries or chargers are included**. Batteries visible in photographs are demonstration items only.

This guide helps you inspect and understand the package before flight. It does not certify a tune, flight test, GPS Rescue setup or a particular switch assignment. Confirm the handover checklist on page 6 with the builder.

Remove every propeller before bench setup. Keep the aircraft disarmed, disconnect the flight battery before handling it, and provide cooling during powered video-system setup.

1 / Meet the aircraft

Component	This build
Frame / prop size	Flyfish Volador VDX35, T700 carbon / 3.5 inches
Flight controller / ESC	Flywoo F722 Mini Pro / 45A AM32
Motors	Spark VCI 1404 4000KV
Video system	DJI O4 Air Unit Pro
Control receiver	Happymodel 2.4GHz ExpressLRS
GPS / buzzer	BZ-181 M10 / loud buzzer
Flight battery	4S required; not included



Actual motor close-up: 1404 4000KV.

Receiver identification: Michael identifies the fitted unit as EP1 with a built-in ceramic antenna. Happymodel documentation distinguishes EP1 and EP2 antenna designs, so check the board marking before selecting a receiver firmware target. Do not flash a target based on the model name alone.

2 / Battery and bench setup



Actual installation reference. The pictured battery is NOT included.

Use 4S only for this package. Confirm the connector, polarity, pack dimensions and suitable capacity with the builder before purchase. This guide does not prescribe a capacity. Do not assume a physically fitting connector means the voltage is suitable.

With power disconnected, inspect the frame, motor screws, props, antenna mounts, wire insulation and battery straps. Position a suitable pack securely; keep its main lead and balance lead away from every propeller arc. Do not obstruct the GPS antenna or cooling.

Use charging equipment appropriate for the exact battery chemistry and cell count. Follow the pack and charger instructions, charge attended on a suitable nonflammable surface, and do not use damaged or swollen packs. Disconnect the pack after use; use the manufacturer's storage procedure.

The Pocket Crush uses two suitable 18650 cells. No removable radio cells or charger are supplied with this package. Follow RadioMaster polarity and charging instructions; never substitute the aircraft's 4S pack as the radio supply.

3 / Two separate radio links

Control: Pocket Crush to ExpressLRS receiver

The configured Pocket Crush sends stick and switch commands to the Happymodel receiver. Start with the supplied model configuration; do not erase it or update firmware merely because an update is available. Save backups first.

With props removed, switch on the radio, select the correct model and power the aircraft as instructed for the build. In Betaflight, confirm roll, pitch, yaw and throttle respond correctly. Identify the arm switch and each assigned mode. Keep throttle low and verify disarm behavior.

If control does not connect, check the selected model, receiver power and ExpressLRS version compatibility. Binding method depends on the installed configuration. Follow the ExpressLRS binding documentation; do not disclose or overwrite a private binding phrase casually.

Video: O4 Air Unit Pro to Goggles N3

The goggles receive the camera picture through DJI's video link. A live image is not proof that the control receiver is linked. Likewise, a working radio does not establish the video connection.

Begin with the configured pairing. If the image is missing, confirm the compatible product mode and firmware using DJI's O4 documentation. Complete any required activation, then use the documented linking procedure. Leave propellers off and cool the air unit during powered setup; avoid prolonged stationary operation without airflow.

Before flight, verify a clear live picture, useful battery telemetry and the display information you rely on. Record goggles and radio configuration details at handover rather than guessing switch names.

Link check

Control confirmed? Correct channel movement and switches.

Video confirmed? Clear live camera image.

Both required. Stop if either connection behaves unexpectedly.

4 / Betaflight, GPS and first flight

Back up the current configuration before changing it. Record the installed firmware version and save a CLI **diff all**. This build's firmware version has not been confirmed; do not apply a version-specific CLI recipe blindly.

With props removed, check board orientation, receiver channels, arming/mode ranges and battery readings. Confirm motor order and rotation using the correct Betaflight procedure. Prop rotation for this build is unconfirmed: fit each prop only after matching its orientation to the verified motor direction. Never use a guessed props-in/props-out diagram.

Have the configured failsafe behavior explained and checked safely with props removed. GPS Rescue needs its own setup and flight testing. GPS hardware alone does not establish a safe return function, position hold or obstacle avoidance.



Actual BZ-181 M10 installation: give the antenna a clear view of the sky.

Outdoors, allow the receiver to obtain a usable fix and verify the configured readiness requirements. Do not lower safety thresholds merely to make the aircraft arm. Satellite count alone is not proof of position quality.

Practice in a simulator before flying. For the first outing, use a suitable open area, comply with local rules and keep people clear. Confirm the aircraft's actual mode behavior, make a short controlled flight, land with a conservative battery reserve and inspect for heat, loose hardware or damage. Disarm immediately after landing.

5 / Handover checklist

Complete these details with the builder before treating the package as flight-ready. Blank items are intentionally unresolved, not implied settings.

[] Aircraft condition and final included accessories

[] Charcoal Pocket Crush: selected model name

[] Receiver board marking / exact firmware target

[] Flight-controller firmware version and saved backup

[] Arm, buzzer and flight-mode switch assignments

[] Motor order, rotation and propeller orientation verified

[] Suitable 4S pack capacity, dimensions and connector

[] Failsafe behavior and any GPS Rescue test status

[] Control and video checks after shipping

Official references

[Betaflight setup](#)

[Betaflight motor checks](#)

[Betaflight GPS Rescue](#)

[ExpressLRS binding](#)

[DJI O4 support](#)

[RadioMaster Pocket Crush](#)

[Happymodel receiver identification](#)

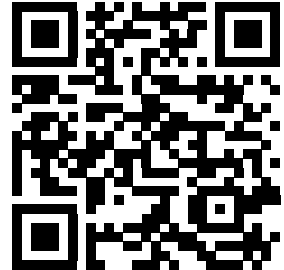
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Use instructions for your exact aircraft and installed firmware.
Remove propellers before powered bench setup.