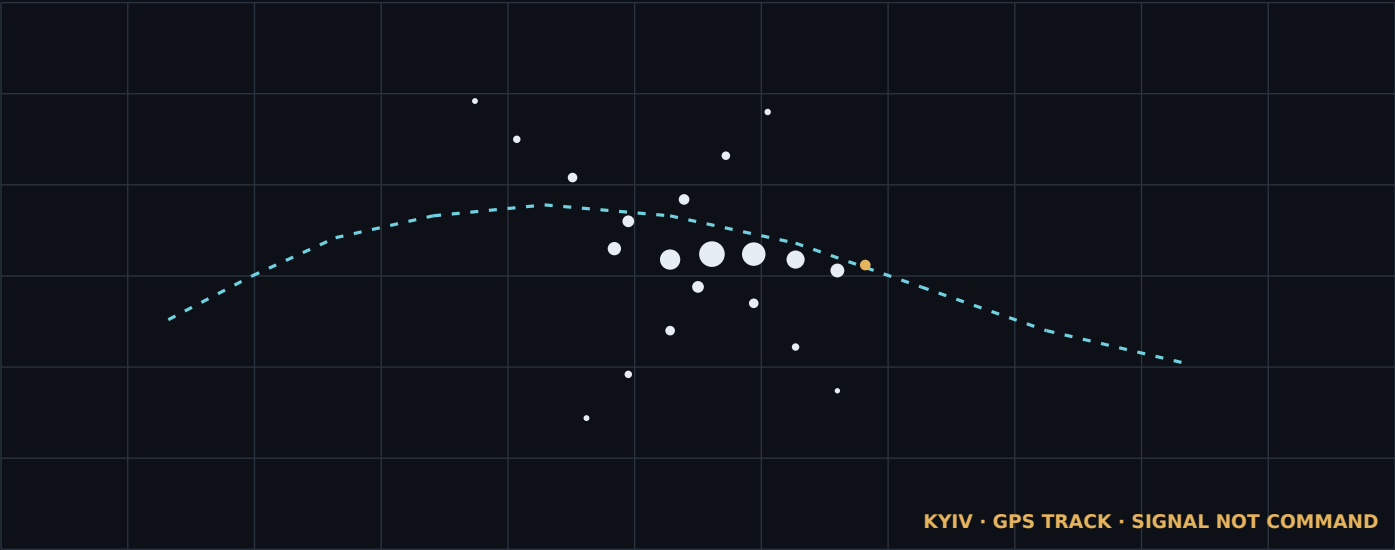


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# PIGEONBRAIN

A biological flight computer for public signals



PIGEONBRAIN is a public signal system built around one living homing pigeon in Kyiv. A GPS tracker records where the bird flies. A loft camera records the place it returns to. The system publishes a single signal only after the bird comes home: landing heading chooses the sector, peak altitude chooses the magnitude, and every short or invalid flight is preserved as a discarded record.

|           |              |                      |                          |
|-----------|--------------|----------------------|--------------------------|
| 1<br>BIRD | 8<br>SECTORS | 140 m<br>RANGE FLOOR | 90 m<br>ALTITUDE CEILING |
|-----------|--------------|----------------------|--------------------------|

|            |                                                                                                                                   |
|------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Status     | Concept and operating protocol; tracker, stream URL and contract address are final-input placeholders.                            |
| Location   | Kyiv, Ukraine; loft coordinate shown at system level, not as a precise home address.                                              |
| Token      | \$PIGEONBRAIN; token mechanics are intentionally separate from bird welfare and signal generation.                                |
| Core claim | The bird does not predict, trade, understand or choose. The bird produces motion; the protocol turns motion into a public signal. |

# 0. Executive thesis

FlyBrain made people care because it treated biological computation as an instrument panel. It did not need to pretend a fly was human. It made the strange thing legible: living tissue produced signals, and the website made those signals visible.

PIGEONBRAIN uses the same meta without copying the subject. The unit of intelligence is not a lab reconstruction of a nervous system. It is a trained homing pigeon navigating a real city, with a public protocol attached to the flight. The bird is not a mascot. The flight is the computation.

**“A signal is not created when a person clicks a button. It is created when the bird returns.”**

The project should be understood as a live, high-friction, biological oracle: slow, physical, imperfect, weather-dependent and impossible to rush without breaking the premise. That slowness is the spectacle. People wait for a countdown, watch a loft, follow a line on a map, and argue over a signal that came from an animal doing what it already does.

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## **The simplest public sentence**

One pigeon in Kyiv wears a GPS tracker. When it flies and comes back, its route publishes a signal. Direction decides the sector. Altitude decides the strength. The bird is never steered.

## **The strongest public tension**

Everyone can see the rule. Nobody can know where the pigeon will go. That makes the next flight genuinely uncertain without needing to fake personality, agency or prophecy.

# 1. What the project is

PIGEONBRAIN is a public interface for biological motion. The live page, stream and whitepaper all orbit the same mechanism: a physical pigeon produces an unpredictable flight path inside Kyiv; a fixed rule turns that path into one discrete signal after landing.

The system has four layers:

- 01 The animal layer: a real homing pigeon, trained to return to its loft and treated as the source of flight data.
- 02 The sensor layer: GPS, altitude, timestamp, speed, battery and signal-health readings from a lightweight tracker.
- 03 The protocol layer: fixed thresholds and formulas that transform a completed flight into a sector and magnitude.
- 04 The public layer: website, X livestream, historical archive and social updates that let observers see the same event at the same time.

The result is neither a trading bot nor a prediction market. It is a signal feed. A signal can be interpreted by viewers, but interpretation is downstream of the project, not controlled by the bird and not promised by the protocol.

## Non-goals

- Do not claim the bird understands markets, politics, people, questions or outcomes.
- Do not present prerecorded material as a live camera feed. If footage is rebroadcast, label it as rebroadcast.
- Do not force flights for content. A missed window is part of the system, not a failure to hide.
- Do not let the token dictate how the bird is handled, housed or flown.

## 2. The core mechanism



Nothing is published until the bird comes home. No mid-flight interpretation. No human steering.

The protocol starts before the bird leaves. A public countdown marks a flight window. The loft door may open inside that window, but the bird is not thrown, chased or trained toward a result. Some windows produce no flight. Empty windows are logged because absence is part of the instrument.

During flight, the system shows telemetry: range from loft, trail shape, speed, altitude, heading, satellites, tracker battery and signal strength. These values are visible while they happen, but no signal is published mid-flight. The bird can turn, circle, climb, hesitate or come back; none of it is final until landing.

At landing, the protocol takes a single snapshot. It checks whether the flight qualifies. If it does, the landing heading maps to a compass sector and the peak altitude maps to signal magnitude. If it does not, the system records the attempt as discarded with the reason. This preserves the integrity of the record: the page cannot show only impressive flights without visibly breaking its own archive.

### Qualification rule

|                     |                                                                                                |
|---------------------|------------------------------------------------------------------------------------------------|
| Range threshold     | The bird must travel more than 140 metres from the loft at least once during the flight.       |
| Altitude threshold  | The flight must exceed 8 metres above the loft roof. This filters roof hops and perch changes. |
| Landing requirement | A signal exists only after return. A flight still in progress remains pending.                 |
| Discarded records   | Invalid flights remain public and keep their timestamps, notes and sensor summary.             |

### 3. Signal formula

The formula is intentionally boring. It must be easy to explain before a flight, easy to verify after a flight and hard to manipulate without being noticed.

#### 3.1 Sector from landing heading

The landing heading is converted to one of eight sectors. Eight sectors are used instead of sixteen for public readability; the live page can still display precise degrees.

|    |                  |
|----|------------------|
| N  | 337.5° to 22.5°  |
| NE | 22.5° to 67.5°   |
| E  | 67.5° to 112.5°  |
| SE | 112.5° to 157.5° |
| S  | 157.5° to 202.5° |
| SW | 202.5° to 247.5° |
| W  | 247.5° to 292.5° |
| NW | 292.5° to 337.5° |

#### 3.2 Magnitude from peak altitude

Magnitude is a 0 to 100 value derived from peak altitude above the loft roof. The working ceiling is 90 metres. Anything at or above 90 metres resolves to 100.

```
magnitude = min(100, round((peak_altitude_m / 90) × 100, 1))
```

#### 3.3 Example

|               |                                                                                                     |
|---------------|-----------------------------------------------------------------------------------------------------|
| Flight        | Depart 07:41; duration 22 minutes; maximum range 1.84 km; peak altitude 61 m; landing heading 038°. |
| Qualification | Range passes 140 m. Altitude passes 8 m. Landing exists. Flight qualifies.                          |
| Signal        | 038° maps to NE. 61 m / 90 m = 67.8%. Published signal: NE · 67.8.                                  |

## 4. Why people will care

The project works because it has proof, suspense and absurdity in the same object. A pigeon flying over Kyiv is ordinary. A pigeon whose route becomes a public signal is not. The whitepaper should preserve that tension instead of over-explaining it into a joke.

### Four psychological hooks

- 01 Waiting: the countdown gives people a reason to gather before anything happens.
- 02 Uncertainty: even the owner cannot know the route, sector or magnitude before return.
- 03 Receipts: telemetry, livestream, archive and discarded flights make the event feel inspectable.
- 04 Restraint: the project does not claim animal prophecy. It says: here is the rule; here is the bird; here is what happened.

### The meta

The broader meta is biological intelligence. Not artificial intelligence, not a chatbot, not a simulated animal. A living navigation system creates a signal by moving through the world. The interface turns that movement into something spectators can read.

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The most important design choice is to keep the bird real and the claims narrow. If the claims become too magical, the project becomes cheap. If the telemetry is concrete, the project becomes strange enough on its own.

## 5. Physical system

The physical setup should be built like a small field station, not like a gimmick. Every visible object should have a reason: the loft, the camera, the tracker, the laptop countdown, and the public page all reinforce one operational loop.

### 5.1 Pigeon and loft

- One named homing pigeon, identified consistently across the page, stream and archive.
- A stable home loft in Kyiv, with food, water, shelter and a familiar return point.
- Flight windows that respect daylight, weather, rest and the bird's normal routine.
- A public rule that a missed flight window is not overridden by handling pressure.

### 5.2 Tracker

- Lightweight GPS tracker appropriate for pigeon use and fitted with animal welfare in mind.
- Required readings: timestamp, latitude, longitude, altitude, speed, heading and battery.
- Useful readings: satellite count, horizontal accuracy, signal quality and storage status.
- Preferred behavior: local logging plus live transmission where possible, so a weak connection does not erase a flight.

### 5.3 Loft camera

- Fixed camera pointed at the loft entrance, not moved for drama during the event.
- Visible laptop or secondary display showing the same countdown and page state as the website.
- Audio optional; the visual proof is the bird returning and the countdown matching public time.
- If the stream drops, the system should show stream interrupted rather than pretending continuity.

## 6. X livestream operating model

The X livestream is the social arena. The website is the instrument panel. They should show the same moment from two angles: the X stream shows the physical loft and laptop; the website shows the data layer and archive.

### Recommended live scene

|                  |                                                                                                                                                             |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Camera view      | Loft entrance visible, enough surrounding space to see takeoff and return.                                                                                  |
| Laptop screen    | Full-screen countdown and chart visible in frame. The timer should match the website.                                                                       |
| Pinned post text | “PIGEONBRAIN flight window live. If he flies and returns, heading becomes sector and altitude becomes magnitude. If he does not fly, nothing is published.” |
| Website behavior | Embed stream when X allows it. Always show an “open on X” fallback because X often blocks iframe playback.                                                  |
| After landing    | Post the signal summary with time, range, peak altitude, landing heading, sector, magnitude and whether it qualified.                                       |

### Ten-minute countdown

The final ten minutes should feel like an instrument arming itself, not like a marketing timer. The countdown exists because the loft window is real. If the bird chooses not to fly, the public gets an empty result. That is more credible than forcing a flight to satisfy the timer.

## 7. Public interface architecture

The current website already follows the correct shape: a dark live instrument page with hero status, countdown, contract bar, live panel, decision engine, event stream, archive, narrative, token section and honesty notes.

### Page sections

|               |                                                                                                                |
|---------------|----------------------------------------------------------------------------------------------------------------|
| Hero          | PIGEONBRAIN wordmark, species line, specimen and tracker readouts, observed-live indicator and current status. |
| Countdown     | Next Kyiv flight window, daily windows, final ten-minute state and X stream slot.                              |
| Live panel    | Loft camera feed, live map, altitude trace, telemetry rows and state details.                                  |
| Signal engine | Compass sector, pending signal, magnitude bar and last committed signal.                                       |
| Event stream  | Dense timestamped operational log: takeoffs, landings, idle behavior, weather and discarded events.            |
| Archive       | Historical flights, including failed thresholds, so the public record does not look curated.                   |
| Honesty       | Clear boundary between live, reconstructed, recorded and future real tracker data.                             |

### Data object

A real tracker feed can replace simulation without changing the public concept if it emits the same state shape: phase, time, position, trail, bearing, altitude, speed, distance, satellite count, battery, signal strength, events, pending signal and last published signal.

The page should never have two competing sources of truth. The map, log, decision engine and archive should read from the same stream so they cannot disagree in public.

## 8. Proof and integrity

PIGEONBRAIN does not need heavyweight cryptography on day one, but it does need a path toward verifiability. The project should make it progressively harder to rewrite history while keeping the first public version simple enough to operate.

### Phase 1 — public timestamps

- Countdown visible before flight window.
- X livestream active during the window when possible.
- Signal posted immediately after landing with timestamp and summary values.
- Website archive updated with the same values and a note for invalid flights.

### Phase 2 — raw-track fingerprint

- Export the raw GPS track after landing as JSON or GPX.
- Create a SHA-256 hash of the raw file.
- Publish the hash before publishing interpretation notes.
- Later, release the raw file so anyone can confirm it matches the hash.

### Phase 3 — signed commits

- Sign each qualifying signal with a project key.
- Optionally write the signal hash or compact summary on-chain.
- Keep discarded flights in the same signed record format, even if no token-related event occurs.

### Threat model

|                 |                                                                                    |
|-----------------|------------------------------------------------------------------------------------|
| Cherry-picking  | Mitigation: publish empty windows and discarded flights.                           |
| Manual steering | Mitigation: fixed camera, no handling during active window, public welfare policy. |
| Data rewriting  | Mitigation: immediate timestamped summary, then raw-track hash.                    |
| Stream failure  | Mitigation: visible interrupted state and post-event raw record.                   |

## 9. Token design philosophy

\$PIGEONBRAIN should not be framed as a promise of profit or as a bird-run fund. Its best role is memetic coordination: a shared object around the signal feed, the livestream and the archive.

### Clean token boundary

- The bird does not buy, sell, hold, rebalance or trade anything.
- A published signal is informational and cultural, not an instruction to transact.
- Token supply, chain, contract address and launch venue should be public and easy to verify.
- Any tax, treasury, burn, liquidity or allocation rule must be written plainly before launch.

### Possible uses without overclaiming

|                    |                                                                                           |
|--------------------|-------------------------------------------------------------------------------------------|
| Signal ritual      | Holders watch the flight window and react socially to the published sector and magnitude. |
| Archive identity   | Each qualifying flight can become a numbered public artifact or post.                     |
| Community prompts  | Community can decide what sectors mean culturally, without changing the protocol.         |
| Future proof layer | Flight hashes can be posted on-chain as timestamped public records.                       |

### Language to avoid

- Avoid “the pigeon predicts price.”
- Avoid “the pigeon controls the market.”
- Avoid “guaranteed,” “profit,” “alpha,” or “investment.”
- Avoid any implication that animal behavior is manipulated for token outcomes.

## 10. Animal welfare and operational ethics

The bird is the center of the project, so welfare cannot be a footnote. The system only works if observers believe the pigeon is not being harmed, stressed or used beyond a normal homing routine.

### Operating principles

- 01 Bird first: no signal is worth a dangerous flight, bad weather release or stressful handling.
- 02 Normal behavior: the protocol uses flights the pigeon is already trained for, not punishment, fear or forced direction.
- 03 Weight discipline: tracker weight and harness fit must be suitable for the bird and checked regularly.
- 04 Rest: flight windows can be skipped for weather, fatigue, moulting, injury, heat, cold, air alerts or owner judgment.
- 05 Transparency: skipped windows should be logged as skipped instead of hidden.

### Public welfare note

Suggested public line: “The pigeon is not forced to fly for a signal. If the bird stays in the loft, the protocol publishes nothing. Welfare overrides the countdown.”

# 11. Signal archive specification

Every flight record should be dense enough to feel real but not so complicated that viewers cannot read it. The archive is a credibility layer, not a decorative table.

## Required fields

|                 |                                                                                                                         |
|-----------------|-------------------------------------------------------------------------------------------------------------------------|
| ID              | Sequential public number. Discarded flights may share the date sequence but should not be counted as published signals. |
| Date and time   | Kyiv local date and departure time; UTC timestamp can be stored internally.                                             |
| Duration        | Minutes airborne.                                                                                                       |
| Range           | Maximum straight-line distance from loft.                                                                               |
| Peak altitude   | Maximum altitude above loft roof.                                                                                       |
| Landing heading | Degrees at landing; sector derived from this.                                                                           |
| Status          | Published, discarded, empty window, stream interrupted or manually voided.                                              |
| Note            | Short operational note: wind, circling, no lift, roof hop, return behavior.                                             |

## Example record

2026-08-24 · depart 07:41 Kyiv · duration 22 min · range 1.84 km · peak 61 m · landing heading 038° · sector NE · magnitude 67.8 · status published · note: crossed the river and came back along it.

## 12. Launch sequence

The launch should feel like a field test becoming public, not like a normal token page going live. The first audience should see enough evidence to understand the rule and enough suspense to wait for the next window.

### Before first public stream

- 01 Choose final bird name, specimen ID and whether the public brand is only PIGEONBRAIN or “PIGEONBRAIN / [bird name]”.
- 02 Confirm tracker model, data export format and whether live GPS is available or post-flight upload only.
- 03 Set real Kyiv flight windows that fit the bird’s routine.
- 04 Replace placeholder historical records with true training-flight records or clearly label them as protocol examples.
- 05 Add the real X livestream URL to the site when going live.
- 06 Add final contract address, chain, supply, tax and launch link only when they are final.

### First stream script

“We are opening the PIGEONBRAIN flight window. If he flies and returns, the GPS track publishes one signal. Direction at landing becomes the sector. Peak altitude becomes the magnitude. If he stays in the loft or only hops around the roof, nothing is published. The bird is not forced, steered or trained toward a result.”

### Post-flight post template

PIGEONBRAIN signal #[number] · [date] [time] Kyiv. Range [x] m/km. Peak [x] m. Landing heading [xxx]°. Sector [N/NE/E/SE/S/SW/W/NW]. Magnitude [x]%. Status: [published/discarded]. Raw-track hash: [optional].

## 13. Brand and interface language

The visual world should stay cold, technical and restrained. The absurdity comes from the subject, not from jokes in the interface. The site should look like an aviation instrument, lab monitor or satellite terminal that happens to be watching a pigeon.

### Design rules

- Near-black background, thin borders, small uppercase labels and tabular numbers.
- Warm amber for commitment, countdown pressure and protocol highlights.
- Cold teal for live tracking, signal health and active telemetry.
- Large serif wordmark for PIGEONBRAIN; monospace for operational data.
- No bubbly mascots, no cartoon pigeon, no generic crypto gradients.

### Voice rules

- Use plain words: bird, loft, tracker, flight, landing, signal.
- Do not talk like the pigeon is conscious of the protocol.
- Let mundane entries remain mundane: preening, no lift, roof hop, wind shift.
- Say “published signal,” not “prediction” or “trade.”

# 14. Risks and mitigations

The project is strongest when it states its weak points before critics do. The limitations are not hidden; they are part of the shape.

|                          |                                                                                                                                          |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Animal welfare criticism | Make welfare policy visible. Skip windows when conditions are wrong. Do not force outcomes.                                              |
| Fake-live accusation     | Label footage accurately. Use live X stream for public events. Distinguish live camera, rebroadcast footage and reconstructed telemetry. |
| Manipulation claims      | Publish discarded flights and raw-track hashes. Keep formulas fixed.                                                                     |
| GPS error                | Show satellite count and signal quality. Mark low-quality tracks as manually voided or uncertain.                                        |
| Regulatory/token risk    | Do not describe signals as financial advice, trading instructions or return expectations.                                                |
| War/location sensitivity | Use Kyiv as city-level context without exposing exact home address or unsafe operational details.                                        |
| Stream platform blocking | Always provide an external X link fallback and keep the website functional without inline video.                                         |

## Honesty wording

Current recommended site wording: “The camera may be livestreamed or rebroadcast depending on the event. The telemetry layer shows the protocol state. Until the real tracker feed is connected, displayed tracker numbers are reconstructed placeholders for interface testing.”

# 15. Roadmap

The roadmap should remain operational, not promotional. Each milestone either improves proof, improves the live experience or makes the archive harder to dispute.

|                               |                                                                                                             |
|-------------------------------|-------------------------------------------------------------------------------------------------------------|
| M0 — Protocol                 | Publish rule, thresholds, formula, welfare policy and current limitations.                                  |
| M1 — Live page                | Countdown, X stream slot, loft camera, telemetry interface, archive and signal engine.                      |
| M2 — First public window      | Run X livestream with laptop countdown and publish result or empty window.                                  |
| M3 — Real tracker integration | Replace simulated telemetry with tracker data ingestion and consistent public state.                        |
| M4 — Raw record release       | Publish GPX/JSON track files and SHA-256 hashes for completed flights.                                      |
| M5 — Signed signal archive    | Every signal and discarded flight receives a signed record.                                                 |
| M6 — On-chain receipts        | Optional compact hashes or signal summaries written on-chain.                                               |
| M7 — Community layer          | Let viewers follow sectors, discuss interpretations and build rituals without altering the flight protocol. |

# Appendix A — Operating checklist

## Before window

- Bird health checked; weather acceptable; no unsafe local conditions.
- Tracker charged, fitted and logging.
- Loft camera framed and stream tested.
- Website countdown matches laptop countdown.
- Public post prepared with flight-window explanation.

## During window

- Do not handle, chase or redirect the bird for content.
- If bird stays inside, let window expire and log empty result.
- If stream fails, state interruption and keep tracker logging.

## After landing

- Stop or mark flight segment.
- Export summary readings: range, peak altitude, landing heading, duration.
- Apply qualification rule exactly once.
- Publish signal or discarded reason.
- Update archive and social post.

## Appendix B — Technical data schema

This schema is intentionally compact. It is enough to drive the live page, archive and future proof layer.

```
{ "flight_id": "PB-0009", "status": "published", "started_at": "2026-09-22T12:40:00Z", "landed_at": "2026-09-22T13:03:00Z", "loft": { "city": "Kyiv", "country": "Ukraine" }, "metrics": { "duration_sec": 1380, "max_range_m": 1840, "peak_altitude_m": 61, "landing_heading_deg": 38, "satellites_min": 9, "battery_end_pct": 82.4 }, "signal": { "sector": "NE", "magnitude": 67.8, "qualified": true }, "proof": { "raw_track_sha256": "future_hash_here", "stream_url": "future_x_url_here" } }
```

### Final note

The most valuable version of PIGEONBRAIN is not the loudest version. It is the version where the bird, the rule and the public record are all simple enough that strangers can explain them back after one flight window.