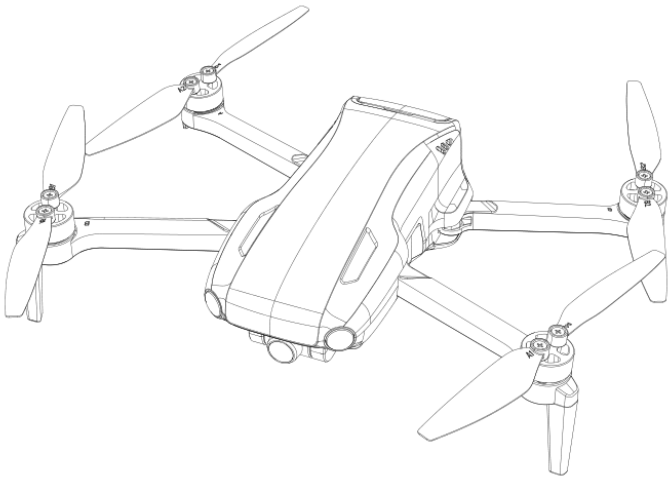
Start here

Prepare the SE model for a safe first flight



Before you fly

Use a clear outdoor area with a strong GPS signal. Keep people, pets, trees and overhead wires away from the flight path. The V11MINI SE **does not have obstacle avoidance**. Its optical-flow/TOF sensors assist positioning; they do not prevent collisions. The manual is labeled ages 14+.

Prepare the aircraft

1. Fully charge the flight battery, controller and phone.
2. With the battery switched off, install it until the latch clicks. Check it is secure.
3. Unfold the **front arms first**, then the rear arms and propeller blades.
4. Remove the camera protector. Inspect the propellers, screws and lens.
5. Place the drone on level ground with its camera/nose facing away from you.

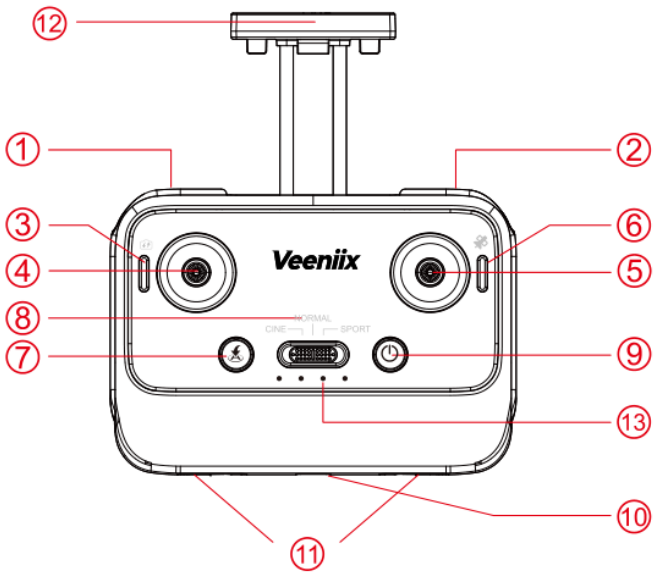
First-flight sequence

Charge → unfold → power on → automatic pairing → connect phone by data cable → open Veeniix PRO → check GPS → calibrate when needed → unlock → take off.

This guide is for the **V11MINI SE**, based on Veeniix's official User Manual v1.0. The regular V11MINI and V11MINI 4K use different instructions. Original source links are on the last page.

Know the controls

Original numbered SE controller diagram



Controls 1-7

#	Control	What it does
1	Camera / gimbal dial	Turn the dial to tilt the camera up or down. The manual calls this a gimbal dial; it does not establish 3-axis stabilization.
2	Photo / video	Short press: take a photo. Hold about 3 seconds: start recording. Hold again: stop recording.
3	One-touch camera tilt	Press to point the camera fully downward. Press again to return it to horizontal.
4	Left joystick	Default Mode 2: up/down changes altitude; left/right rotates the nose.
5	Right joystick	Default Mode 2: up/down flies forward/backward; left/right flies sideways.
6	GPS / indoor mode	Hold 3 seconds to turn GPS off; hold another 3 seconds to turn it on. GPS starts enabled by default.
7	Return-to-home	Short press to return to the recorded home point. Press again to cancel Smart RTH.

All controller functions

Speed, power, ports, sticks and indicators

Controls 8-13

#	Control	What it does
8	Three-speed selector	Left: CINE / low. Center: NORMAL / medium. Right: SPORT / high. Use the physical slider to select speed.
9	Power	Hold approximately 3 seconds to turn the controller on. Hold again to turn it off.
10	Charging port	Connect the controller charging lead here. The charging section identifies the controller interface as Micro-USB.
11	Stick storage sockets	Store the removable control sticks here when not in use. Fit the sticks securely before flying.
12	Phone holder	Extend the holder, fit the phone securely and connect the correct phone data cable.
13	Indicator lights	Show controller battery, pairing, GPS-search, return and charging states. Confirm readiness in the app as well.

Speed and control layout

Start in **CINE / low speed**. Normal gives a quicker response; Sport needs more space and at least **3 meters of braking clearance**, according to Veeniix. Speed changes do not create obstacle avoidance.

This guide uses the default **American / Mode 2** layout. The official manual also describes a Japanese layout entered by holding the photo/video button while powering the controller on. Avoid doing this accidentally; confirm stick behavior before flight.

Keep GPS enabled outdoors. Button 6 switches GPS mode; it is not a dedicated compass-calibration button. This SE controller diagram has no separate takeoff/landing button. Use the app takeoff/landing control or the manual stick method on page 7.

Battery and charging

Charge both the drone and controller before flight



Charge the flight battery

1. Switch the battery off before removal. Press the side latches and pull it out.
2. Let a recently used battery cool.
3. Connect the supplied charging lead and a **5V USB supply rated 2A or 3A**, as recommended in the charging instructions.
4. Battery indicators flash during charging. The manual says charging is complete when the fourth indicator remains on.
5. Disconnect the charger and install the battery firmly before use.

The battery specification gives approximately **3 hours**, depending on charging power. Charge under supervision. Do not use a damaged, swollen, wet or deformed battery, and do not exceed the ratings printed on the actual battery and charging equipment.

Power the aircraft on or off

Hold the battery power button until the four indicators light, then release. To switch off, hold it until all indicators go out. Do not install or remove the battery while it is powered on.

Charge the controller

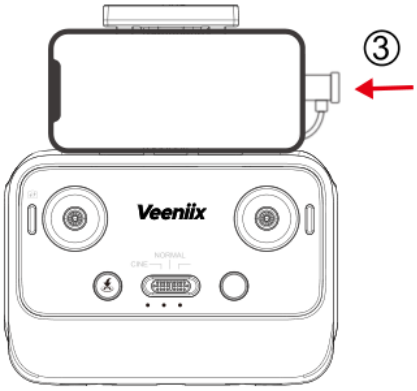
Use its charging port and the supplied lead. The manual specifies a **5V/2A or 5V/3A** USB supply. The four lights flash in sequence while charging and remain on when full. The specification gives about **4 hours** to charge the controller.

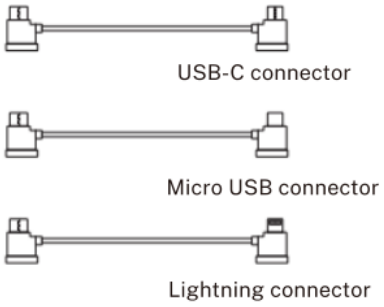
Store and inspect

Store flight batteries around **50-60% charged** in a cool, dry place. Check them about monthly. Remove the flight battery for extended storage. Wind, cold and aggressive flying shorten endurance; land on the first low-battery warning.

Pair and connect your phone

Veeniix PRO uses a phone-to-controller data cable





Automatic pairing

1. Prepare the aircraft on level ground and hold its power button to switch on.
2. Hold the controller power button for about **3 seconds**.
3. Wait approximately **50 seconds** for automatic pairing.
4. The controller link light becomes steady and the app can display drone information and camera video. GPS search may still be in progress: pairing alone does not mean ready to fly.

Connect Veeniix PRO

1. Install **Veeniix PRO** from your phone's app store. Load the map while internet access is available.
2. Fit the phone securely and connect it to the controller using the appropriate **USB-C, Lightning or Micro-USB data cable**.
3. Open Veeniix PRO. On iPhone, accept **Trust** if prompted. On Android, allow Veeniix PRO to open for the USB device; select **Transferring files** if required.
4. Allow the needed location, local-network, photo/album and recording permissions.
5. Enter the Control screen. A live image plus controller/drone status confirms the connection.

Do not follow the regular V11MINI's phone Wi-Fi setup. On this SE, the **phone connects to the controller by data cable**. If video is missing, check that the cable carries data, is fully seated and is not blocked by the phone case.

Compass calibration

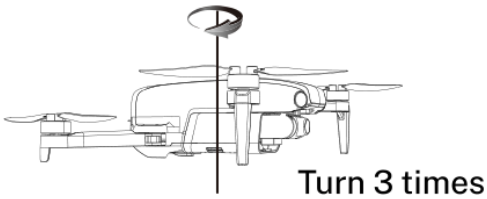
Use the SE app control or its correct stick gesture

When to calibrate

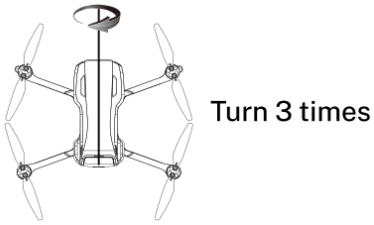
Calibrate when the app requests it, when changing to a magnetically disturbed location or after an interference warning. Move away from metal, vehicles, wires and structures first. The manual gives inconsistent numeric interference thresholds, so follow the app warning rather than a single number.



1. Enter calibration: In the app Safety settings choose **Compass Calibration**. Alternatively, hold the **left stick at 11 o'clock** (up-left) and **right stick at 1 o'clock** (up-right) for about **2 seconds**. The green drone light goes out as calibration begins.



2. Horizontal: With all arms unfolded, hold the drone level about **1 meter / 3.3 feet** above ground. Rotate it horizontally about **three full turns**, following the app prompt for the next stage.



3. Vertical: Hold the camera facing **upward** and rotate about three full turns until the vertical-calibration prompt disappears. Place the drone back on level ground and wait for the status confirmation.

Level, take off and land

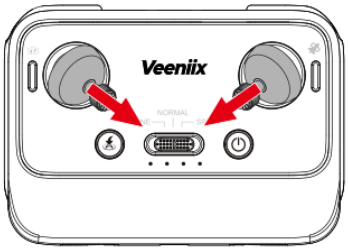
Default Mode 2 layout and SE motor-start method

Gyroscope / level calibration

Place the drone still on flat ground. In app Safety settings select **Gyroscope Calibration**, or move the **right stick to 5 o'clock** (down-right). The rear light flashes quickly, then returns to its previous state when complete. The app shows “Fly” when ready. Calibrate only while landed.

Check GPS, then start the motors

Wait for at least **3 GPS bars**, a steady green aircraft GPS/status indication and a recorded home point. Keep Beginner mode enabled initially. Confirm the area is clear before starting motors.



Move the **left stick to 5 o'clock** (down-right) and the **right stick to 7 o'clock** (down-left). Release both as soon as the motors start. Gently raise the left stick to take off, or use the app takeoff control and its slide-to-confirm prompt. Automatic takeoff rises to roughly **1.5 meters / 4.9 feet**.

Stick	Up / down	Left / right
Left	Climb / descend	Rotate left / right
Right	Forward / backward	Sideways left / right

Land and shut down

Use the app landing icon and slide to confirm. For manual landing, lower the left stick gently; the drone may pause around 0.5 meter before you continue lowering it to land. After touchdown, hold the left stick down until the motors stop. Switch the aircraft off, then the controller. **Never use the motor-stop stick combination in flight.**

Return to home

Check the home point, GPS and return altitude

Start and cancel Smart RTH

Short-press **Return (7)** or tap the app RTH icon to return to the last recorded home point. Press Return again to cancel Smart RTH. The controller indicators cycle during return. Stay ready to steer clear of obstacles; landing can be several meters from the original takeoff spot.

Set a clear return route

The default return height is **20 meters / 65 feet** when no other value is set. The manual lists an app return-altitude range of **10-120 meters**. Set an appropriate height before flight, within applicable limits.

Aircraft position	Return behavior
Below the set RTH height	Climbs to the selected return height, then returns.
Above the set RTH height	Returns at its current altitude.

No obstacle avoidance: The SE cannot detect trees, buildings or wires during return. A home point, adequate GPS and enough battery are required. GPS-off mode disables automatic return and intelligent flight features.

Low battery

Low battery can trigger automatic return. The manual describes an initial return/hover stage and a critical stage that **descends directly from the current position**. Do not assume a critical battery will still bring the drone home. Land promptly at the first warning. The source disagrees on the initial hover altitude, so do not plan around that value.

Lost controller signal

A signal loss of about **10 seconds** can trigger GPS return. If the link reconnects, press Return to cancel when safe and resume control. RTH returns to the recorded takeoff/home location, not to a moving controller. A new takeoff from another location can update the home point.

Camera and app controls

Original Veeniix PRO interface for the SE



Read the screen

Across the top, check **GPS**, **controller battery**, **aircraft battery** and warning messages. The left side includes **takeoff/landing**, **RTH** and the feature menu. On the right, choose **photo/video**, press the round **shutter** or open the **album**.

Safety settings contain Beginner mode, flight distance/height, return altitude and calibration. Track contains flight records, exportable logs and **Find Drone**, which shows the last known location rather than guaranteeing live tracking.

Take photos and record

Controller button 2: short press for a photo; hold about 3 seconds to start video and hold again to stop. Use the dial **(1)** to tilt the camera, or button **3** for down/horizontal positioning.

The manual lists **3840 × 2160 photos** and card video up to **4K/20fps**, with a **2976 × 1680/30fps** option. Phone-preview recordings can be lower resolution.

microSD and downloading

Use a **FAT32 microSD card up to 128GB, Class 10/U1 or faster**. For the best-quality files, use the card originals. Power the drone on, connect the controller and phone, then use the app album/download function. Verify the saved files: the manual gives conflicting statements about simultaneous phone/card storage. Stop recording before powering off.

Intelligent flight features

Five SE modes; all require active supervision

Route Rules / waypoints

In GPS mode, open the route tool, mark up to **16 points** inside the map's permitted circle, check the whole path and tap **Send**. Load maps before flight. Move the **right joystick** to cancel waypoint flight.

GPS Follow

Enable phone location, connect by data cable and fly in an open area with strong GPS. Veeniix recommends **10-50 meters** separation. Choose GPS Follow in the feature menu and confirm activation. Tap the same feature again to exit. It follows the operator's location and does not avoid obstacles.

Point of Interest / orbit

Fly to the intended center point, hover and select Point of Interest. Use the right stick forward/back to adjust the radius between **5 and 50 meters**; left/right adjusts orbit speed and direction. If below 5 meters, the drone can rise to 5 meters before circling. Tap the feature again to exit.

Gesture photo and video

Select **Ges Quickshot** for gesture photos or **Ges Record** for video. Use the **right hand** at shoulder height in good light. The manual depicts a V-sign for a photo and an open palm for video. Tap the mode again to exit. Check the on-screen response rather than assuming capture occurred.

Image Follow

Open Image Follow, slide to start, select the object/person on screen and confirm the frame. Veeniix describes the drone **rotating to follow movement**. This is different from GPS Follow; do not assume the aircraft will travel safely behind a subject.

GPS-off / indoor mode: Hold button 6 for 3 seconds to disable GPS. Optical-flow/TOF positioning works best about 0.5-3 meters above a well-lit, textured floor. Mirrors, water, plain shiny floors and poor light can cause drift. This mode removes GPS return protection; keep GPS enabled for outdoor flights.

Fix common problems

Use the SE model instructions and current app warnings

Problem	What to check
No pairing / camera image	Allow about 50 seconds for automatic pairing. Check the phone data cable, connector seating, correct Veeniix PRO app, Trust/USB settings and required permissions.
Motors will not start	Charge batteries, check GPS is enabled with adequate signal, follow calibration prompts and use left 5 o'clock / right 7 o'clock or the app unlock control.
Drift / circling	Land promptly. Move away from interference, check propellers, and recalibrate compass/level on suitable ground.
Limited to about 30 m	Check Beginner mode and saved distance/height limits. Keep it enabled while learning.
No files on microSD	Check available space, FAT32 format and card speed. Back up files before formatting. Stop recording before shutdown.
Blurry camera image	Remove the camera protector and gently clean the lens. Use low/medium speed and small stick movements.
Poor return / GPS loss	Keep GPS on outdoors, confirm the recorded home point, and avoid buildings or tree cover. Land safely before battery becomes critical.

Care and propellers

Check the battery latch and propeller screws before every flight. Use matching replacement blades: with the camera as the front, **A** blades fit front-left/rear-right and **B** blades fit front-right/rear-left. Replace damaged parts and match the arm markings. Keep the downward sensor lens clean.

Official source

Prepared from **Veeniix V11MINI SE User Manual v1.0** (2024), with original manufacturer illustrations. This guide reorganizes the instructions and flags conflicts rather than inventing missing steps.

Open the complete official V11MINI SE manual
Open Veeniix support and downloads