

First 30 Nights Protocol

Calibration sequence, threshold adjustment, and what to expect during the adaptation phase.

Read this document before powering on the device.
Do not skip the calibration night.

VERSION v3.2

PAGES 12

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DEVICE VELO-X Gen 3 · nRF5340 · BLE 5.3

01 — *Before You Begin*

This document assumes you have already read the safety documentation and understand that Velo-X is not a medical device. If you haven't, stop here and read *When to Stop* first.

The first thirty nights are not about results. They are about building a signal relationship between the device and your specific REM profile. Everyone's baseline is different. The device adapts to yours.

Resist the temptation to increase sensitivity settings during the first two weeks. The algorithm needs a clean dataset before it can optimize. Interference from aggressive settings will corrupt the baseline.

WHAT YOU NEED BEFORE NIGHT 0

- Charged device (full charge, 3-4 hours from empty)
- Velo-X app installed and paired via BLE
- A consistent sleep window – same ± 30 minutes each night
- A sleep journal, physical or digital (not the app)
- No alcohol for 48 hours before the calibration night
- No new sleep supplements during the first two weeks

NOTE ON EXPECTATIONS

Most users do not experience a lucid dream during the first thirty nights. This is not a failure. The protocol is calibration, not performance.

02 — Calibration Night (Night 0)

Night 0 is a passive data collection session. The device will monitor but will not emit any light signal. This gives the algorithm your unperturbed REM signature.

20:00 – 2 HOURS BEFORE SLEEP

Open the app. Confirm firmware is v3.2 or later. Run the strap-fit diagnostic. EOG impedance should read below 5 k Ω on both sensors. If either reads above 8 k Ω , reposition the strap and retest.

AT BEDTIME

Power on the device with a single press. The haptic pulse (0.2 G, 80 ms) confirms standby mode. Do not interact with the device again. Sleep in your normal position. Side-sleeping is supported.

MORNING

Open the app within 15 minutes of waking. The calibration summary will show estimated REM onset time, cycle count, and signal quality score. A score above 72 is sufficient to proceed to Night 1. Below 60: repeat Night 0 the following night.

03 – Week One: Nights 1–7

The device begins emitting light cues starting Night 1. Default settings: intensity 0.08 cd/m², 2 pulses, 600 ms interval. Do not change these.

You will probably not perceive the cues consciously. You may notice nothing at all for the entire first week. This is normal and expected.

DAILY PRACTICE DURING WEEK ONE

- *Reality checks*

Ten per day, minimum. Not mechanical. Each one should carry genuine doubt. If you are certain you are awake, the check failed.

- *Sleep journal*

Write immediately on waking. Not just dream content – note the quality of transitions, any moments of unusual clarity, and whether you recalled the device at any point.

- *Cue review in app*

Each morning, check whether the device logged a cue during your REM window. Cross-reference with your journal. Pattern recognition takes weeks. Start logging now.

- *No daytime naps*

During Week One. Naps fragment the REM architecture the device is mapping. Introduce them only from Week Three.

END-OF-WEEK THRESHOLD REVIEW

After Night 7, the app will display a week summary with a recommended threshold adjustment. Three possible outcomes:

No adjustment needed

Signal quality is consistent. Proceed to Week Two without changes.

Increase sensitivity +1

REM windows were detected but cues were absorbed without response. The device will increase intensity slightly. Review sleep fragmentation markers before accepting – if sleep debt is already present, defer.

Extend baseline collection

Signal quality was insufficient. Repeat calibration night before proceeding. This happens in approximately 15% of first weeks.

04 – *Week Two: Nights 8–14*

By Night 8, the device has enough data to begin adaptive scheduling. Cues will no longer be emitted at fixed intervals – the algorithm will target the optimal window within your REM cycle.

Some users report the first anomalies during Week Two: a dream element that feels slightly wrong, a moment of heightened awareness before sleep onset, or the briefest sense that something outside the dream was trying to communicate. These are not lucid events. They are integration attempts – the brain making contact with the signal.

ADJUSTED PRACTICES FOR WEEK TWO

- Continue reality checks. Increase to 15 per day if Week One felt passive.
- Begin prospective memory training: before sleep, identify one specific element to look for in the dream environment. Change it each night.
- Log cue-response pairs in the app. Mark any dreams where something felt unstable, foreign, or questioned.
- Maintain the consistent sleep window. Variance above 45 minutes significantly degrades adaptive scheduling quality.

IF YOU EXPERIENCE SLEEP FRAGMENTATION

Some users notice lighter sleep or more frequent waking during Week Two. This typically resolves by Night 11–12. If it persists beyond Night 14, lower the cue intensity by one step in the app and continue. Do not discontinue use abruptly – taper over 3 nights.

05 — Week Three: Nights 15–21

Week Three is typically when the first confirmed lucid event occurs, if it occurs during the first month. The device's model of your REM architecture is now mature enough to place cues within the narrowest optimal window.

It may also be when nothing notable happens. Both outcomes contain information. The absence of a lucid event does not indicate failure — it indicates that your recognition threshold has not been crossed yet. The device is not broken. The process is not broken.

NEW OPTIONS AVAILABLE IN WEEK THREE

WBTB supplement (optional)

Wake-Back-To-Bed: set a secondary alarm for 5–6 hours after sleep onset. Stay awake for 20–30 minutes, then return to sleep. The device will detect the re-entry and prioritize the extended REM window that follows. Do not use more than twice per week.

Daytime naps (optional)

20-minute naps are now permitted. Keep them before 15:00 to avoid disrupting your primary sleep window. The device does not activate during naps — they serve recovery, not induction.

Pulse count increase (conditional)

If the app's week summary recommends it, you may increase pulse count from 2 to 3. Do not increase if sleep fragmentation persists.

06 — *Week Four: Nights 22–30*

By Night 22, the device's model is stable. Week Four is the first period in which the adaptive algorithm operates without major recalibration.

Your job is to stay consistent. The device's role shifts from learning to applying. The protocol from here is maintenance, not construction.

After Night 30, the app will generate a full protocol summary: your REM onset average, cue success rate, and a recommended configuration for continued use. Save this report. It is your personal baseline.

POST-30 CONFIGURATION OPTIONS

- Continue with current settings if results are satisfactory
- Increase to advanced protocol (see Signal Parameters & Tuning, v3.2)
- Reduce cue frequency to maintenance mode (2–3 nights per week)
- Full pause for 7–14 days – useful if glossy fatigue has appeared

07 – Signal Interpretation

The cue is two red pulses at 625 nm, below conscious perception threshold. Your dreaming brain will not perceive it as light. It will perceive it as an anomaly in the dream narrative – and attempt to resolve it.

Common integration patterns, documented by users:

- *Direct integration*

The anomaly appears as a red light within the dream – a signal, a warning indicator, a distant flash. Most common.

- *Narrative redirection*

The dream scene shifts abruptly. The brain reroutes rather than explains. Often logged as 'scene cut' in journals.

- *Emotional response*

A sudden wave of unease, urgency, or heightened awareness without an obvious source. The cue has been absorbed but not visualized.

- *Failed integration*

Nothing. The signal is processed and discarded. This is the most common outcome during the first three weeks.

- *Recognition crack*

A moment of doubt: 'this is strange.' This is the target state. Most users lose it within seconds. Document everything.

08 — *When It Doesn't Work*

If thirty nights have passed without any notable event, the protocol has not failed. Some users require a longer baseline. Some require a different configuration. Some require a complete pause before the system can produce useful results.

Before adjusting settings, eliminate the obvious causes:

Inconsistent sleep window

Variance above 45 minutes degrades the algorithm's model significantly. This is the most common cause of poor results in the first month.

Alcohol or sedatives

Both suppress REM substantially. Even moderate alcohol three nights per week can reduce REM duration by 20-40%. The device can't work with a window that doesn't exist.

Sleep debt

Recovery sleep prioritizes slow-wave sleep. REM windows shorten. If you are running significant sleep debt, address it first.

Over-anticipation

Monitoring for results during the day can increase arousal at night. The device requires relaxed sleep onset. If you are lying in bed waiting for the cue, you are already interfering with it.

Strap fit degradation

EOG signal quality degrades if the strap loosens during the night. Run the fit diagnostic weekly.

Appendix A – Default Calibration Table

Factory defaults and recommended ranges for first-month use.

Do not adjust beyond these ranges without reading Signal Parameters & Tuning.

PARAMETER	DEFAULT	RANGE	UNIT
LED intensity	0.08	0.02 – 0.8	cd/m ²
Pulse count	2	1 – 6	pulses
Pulse interval	600	300 – 1200	ms
REM detection threshold	28	12 – 40	µV
EOG impedance limit	5	1 – 8	kΩ
HRV sampling rate	64	32 – 128	Hz
Cue delay after REM onset	8	4 – 20	min
Haptic confirm intensity	0.2	0.1 – 0.4	G
BLE sync interval	300	60 – 600	s
Session data retention	90	7 – 365	days

All settings are stored on-device and sync to the app on next connection.

Factory reset: hold power button for 8 seconds. This erases all calibration data.