

RalphTap – User Guide

A SomaTECH Product



Introduction

The **RalphTap** is a wearable somatic therapy device that uses gentle rhythmic light stimulation to help guide your mind and body into supportive states. By synchronizing light frequencies with natural brain rhythms, RalphTap offers four distinct modes that support relaxation, meditation, alertness, and cognitive clarity.

The device is designed for personal wellness and should be used in comfortable settings.

Safety First

- Do **not** use if you have a history of epilepsy, seizures, or light sensitivity without consulting a medical professional.
 - Use in a safe, seated or resting position.
 - If you experience discomfort, stop immediately and return to **IDLE** mode.
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Device Overview

- **LED Indicators:** Two LEDs on the device.
 - **Blue LED (GPIO2)** → Indicates **IDLE** status with two soft flashes.
 - **Therapy LED (GPIO13)** → Used during **Modes 1–4**, providing the therapeutic light pattern.
 - **Top Button (BOOT button):** Cycles through modes.
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Operating the RalphTap

1. Power On & IDLE Mode

- When turned on, the device begins in **IDLE**.
- IDLE is indicated by **two short blue flashes followed by a pause**.
- In this state, the device is waiting for you to begin.

2. Switching Modes

- Press the **Top Button** once to enter **Mode 1**.
 - Each press advances to the next mode: **Mode 2 → Mode 3 → Mode 4 → back to IDLE**.
 - The active therapy LED will glow and flicker at the correct frequency for each mode.
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The Four Modes of RalphTap

Each mode is aligned with **somatic therapy principles**: grounding the body, calming the nervous system, enhancing focus, or stimulating cognitive clarity.

Mode 1 – Relax / Alpha State (10 Hz)

- **Light Pattern:** Gentle 10 Hz pulses, smooth edges, medium brightness.
 - **Somatic Benefit:** Supports relaxation, grounding, and a gentle release of tension. Encourages the body to shift from “fight or flight” into a state of calm presence.
 - **Suggested Use:** Before bed, after stressful events, or when seeking a calm reset.
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Mode 2 – Meditation / Theta State (6 Hz)

- **Light Pattern:** Slow 6 Hz pulses, smooth and low brightness.
 - **Somatic Benefit:** Deepens mind–body awareness. Supports introspection, body scanning, and somatic meditation practices. Encourages connection to breath and inner states.
 - **Suggested Use:** During mindfulness practice, meditation, or gentle somatic exercises.
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Mode 3 – Alert / Beta State (16 Hz)

- **Light Pattern:** 16 Hz pulses, balanced brightness.
 - **Somatic Benefit:** Engages attention and sharpens awareness. Helpful for overcoming sluggishness or preparing for focused activities. Supports body–mind readiness without overstimulation.
 - **Suggested Use:** Before study, work sessions, or when you need to be more alert.
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Mode 4 – Cognitive / Gamma State (40 Hz)

- **Light Pattern:** 40 Hz rapid pulses, medium brightness, crisp on/off style.
 - **Somatic Benefit:** Stimulates cognitive clarity and higher-order processing. Research has linked 40 Hz entrainment with enhanced sensory integration and memory support.
 - **Suggested Use:** For short sessions when seeking focus, creativity, or mental clarity.
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Returning to IDLE

- After Mode 4, pressing the button again returns the device to **IDLE**.
 - You can also wait until a session completes, and the device will automatically return to IDLE.
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Session Guidelines

- Begin with **5–10 minutes per mode** until you are familiar with the sensations.
 - Use in a quiet, comfortable setting where you can fully relax.
 - Always listen to your body — stop if you feel discomfort.
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Closing Notes

The **RalphTap by SomaTECH** combines modern photic stimulation with somatic therapy principles, giving you a simple, wearable way to reset, restore, and refocus. Each mode aligns with a natural body rhythm — letting light guide you gently into the state you need most.