ECM v3.0 — Autonomous Emotional Cycling Machine

Conceptual Specification — Core Emotion Framework (CEF)

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Version: 3.0 (Autonomous Architecture)

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0. Purpose and Canonical Position

ECM v3.0 is the first Emotional Cycling Machine designed to **autonomously adapt** to the user's emotional state, stability tier, and load capacity.
Where ECM v2.0 introduced multi-wheel architecture and resistance-based calibration, ECM v3.0 introduces:

- autonomous resistance modulation
- self-calibrating center height
- operator-recognition sensors
- dynamic choreography sequencing
- real-time load mapping
- adaptive safety governance

ECM v3.0 does not replace ECM v2.0.
It is the **autonomous device line**, intended for:

- advanced practitioners
- research laboratories
- long-horizon emotional modeling
- system-level emotional governance

ECM v3.0 is the hardware counterpart to:

- PM-15 (Autonomous Governance)
- PM-16 (Systemic Integration)

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1. Core Principles of ECM v3.0

1.1 Autonomy

The device adjusts itself in real time:

- resistance
- height
- sequencing
- micro-wheel activation
- choreography timing

1.2 Systemic Integration

The device reads and responds to:

- stability tier
- load tolerance
- operator activation
- center transitions
- bilateral asymmetry

1.3 Safety Governance

The device enforces CEF-aligned constraints to prevent:

- overload
- destabilization
- unsafe transitions
- operator drift

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2. ECM v3.0 Architecture Overview

ECM v3.0 retains the three-module structure of v2.0 but adds autonomous subsystems.

2.1 Module A — Primary Wheel (Autonomous Version)

The Primary Wheel remains the center-level activator, now enhanced with:

- **auto-height calibration** (Head / Heart / Gut)
- **auto-resistance modulation**
- **real-time load sensing**
- **adaptive motion smoothing**

Height-Adjustment Requirement
The Primary Wheel automatically positions itself at the anatomical height of the Head, Heart, or Gut center. This preserves the vertical emotional axis of the CEF and ensures accurate center-level activation without manual adjustment.

2.2 Module B — Dual Micro-Wheels (Autonomous Version)

Micro-wheels now include:

- operator-recognition sensors
- bilateral load balancing
- micro-resistance modulation
- adaptive operator sequencing

These wheels enable autonomous operator-level cycling and precision modulation.

2.3 Module C — Cross-Center Choreography Ring (Autonomous Version)

The choreography ring now:

- sequences transitions automatically
- adjusts timing based on stability
- prevents unsafe transitions
- provides tactile or visual cues
- adapts to the user's emotional tempo

This is the first ECM capable of **leading** tertiary cycling.

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3. Autonomous Subsystems

ECM v3.0 introduces three new autonomous subsystems.

3.1 Autonomous Resistance Engine (ARE)

The ARE adjusts resistance based on:

- user stability
- load tolerance
- operator activation

- transition difficulty
- session duration

It maintains optimal training intensity and prevents overload.

3.2 Center-Recognition and Height Calibration System (CRHCS)

CRHCS:

- detects which center the user is engaging
- adjusts wheel height automatically
- locks height during transitions
- prevents misalignment

This preserves the vertical emotional axis without manual intervention.

3.3 Emotional Load Mapping System (ELMS)

ELMS tracks:

- micro-tremors
- grip pressure
- motion irregularities
- transition hesitation
- bilateral asymmetry

It uses these signals to infer:

- load
- fatigue
- instability
- operator drift

and adjusts the device accordingly.

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4. ECM v3.0 Cycling Modes

ECM v3.0 expands the cycling hierarchy.

4.1 Primary Mode

Center-level cycling (CW / CCW / Swing).

4.2 Secondary Mode

Operator-level cycling with autonomous micro-wheel modulation.

4.3 Tertiary Mode

Choreography ring guides transitions automatically.

4.4 Quaternary Mode

Adaptive Cycling with dynamic resistance and sequencing.

4.5 Quinary Mode (New)

Autonomous Cycling

The device:

- selects the mode
- adjusts resistance
- sets timing
- guides transitions
- prevents overload
- adapts to the user's emotional state

This is the highest mode in the ECM lineage.

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5. Safety & Governance

ECM v3.0 enforces:

- automatic shutdown during instability
- resistance reduction during overload
- transition blocking during low stability
- operator-level smoothing during drift
- center-height locking during fatigue

This is the first ECM that actively **protects** the user.

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6. Calibration Protocols (v3-Specific)

6.1 Autonomous Multi-Wheel Calibration

- Primary Wheel → center
- micro-wheels → operators
- choreography ring → transitions

6.2 Autonomous Resistance Calibration

- load-response curves
- fatigue detection
- stability-tier adaptation

6.3 Autonomous Choreography Calibration

- transition timing
- sequence optimization
- center reciprocity

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7. Version Notes (v3.0)

ECM v3.0 introduces:

- autonomous resistance
- autonomous height calibration
- operator-recognition sensors
- dynamic choreography sequencing
- real-time load mapping
- adaptive safety governance
- Quinary Mode (Autonomous Cycling)

ECM v3.0 is the first ECM that behaves like a **self-regulating emotional system**.

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8. Conclusion

ECM v3.0 represents the next level of emotional cycling hardware.
It transforms the ECM from a manually operated device into an **autonomous emotional partner** capable of:

- sensing
- adapting
- guiding
- protecting

- optimizing

ECM v3.0 is designed for advanced practitioners, researchers, and system-level emotional modeling, offering the most precise and adaptive emotional cycling experience in the CEF ecosystem.

ECM Disclaimer Block

(Three-Tier System for All ECM Documents)

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1. Practitioner-Level Disclaimer

Practitioner-Level Disclaimer

The Emotional Cycling Machine (ECM) and all associated protocols, guides, and training materials are **non-clinical, non-diagnostic, and non-therapeutic**.
They are designed exclusively for **educational, developmental, and skills-training purposes** within the Core Emotion Framework (CEF).

ECM practice does **not** assess, treat, or diagnose any psychological, emotional, or medical condition.
ECM should **not** be used as a substitute for mental-health care, psychotherapy, counseling, crisis intervention, or medical treatment.

Facilitators must:

- avoid interpreting emotional content
- avoid eliciting emotional disclosure
- avoid framing ECM as therapy
- stop use immediately if a participant shows signs of distress

Users experiencing acute emotional overwhelm, instability, or crisis should discontinue ECM practice and seek appropriate professional support.

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2. User-Level Disclaimer

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The Emotional Cycling Machine (ECM-Lite) is a **non-clinical educational tool** designed to support emotional awareness, clarity, and modulation.
It is **not** a therapeutic device and does **not** diagnose, treat, or assess any emotional or psychological condition.

Use ECM-Lite gently and discontinue if you feel overwhelmed, distressed, or physically uncomfortable.
ECM-Lite is intended for general emotional-skills practice and should not replace professional mental-health care or medical support.

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3. Engineering / Conceptual Disclaimer

Engineering / Conceptual Disclaimer

This document describes the conceptual, mechanical, and engineering architecture of the Emotional Cycling Machine (ECM) within the Core Emotion Framework (CEF).
It is intended for **research, design, and technical reference** only.

The descriptions of emotional states, load, stability, or calibration are **conceptual constructs** within the CEF and are **not** clinical assessments or psychological measurements.
This document does **not** provide therapeutic guidance and should not be interpreted as mental-health instruction.

All emotional terminology is used in a **framework-specific, non-clinical sense**.
