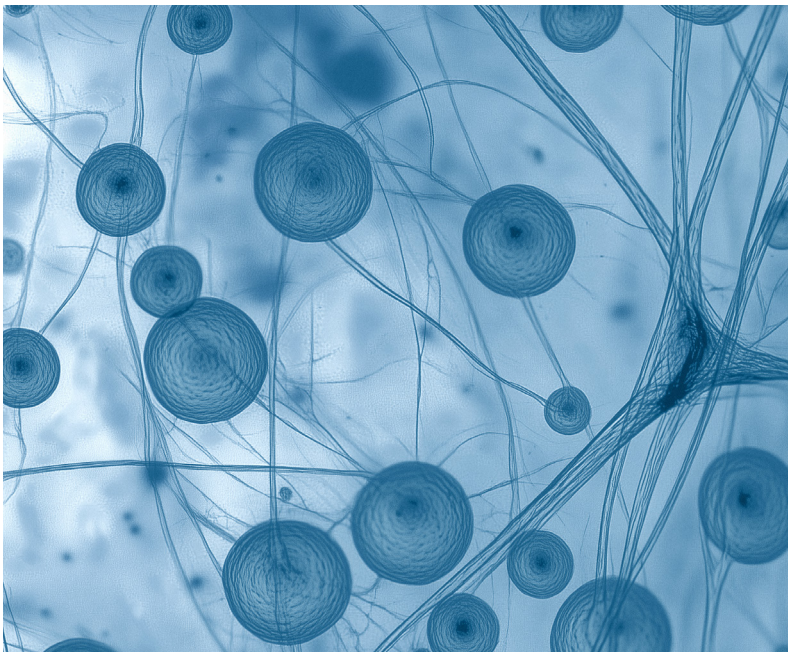
CARDIHALER™ USER MANUAL

Version 3/February 2026



Conscious Breathing

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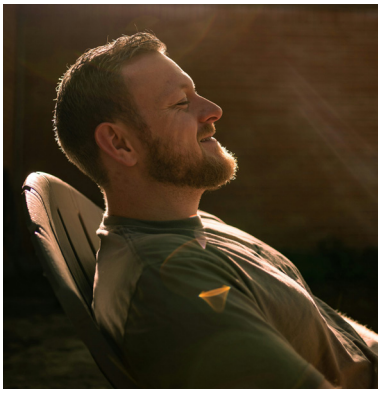
INTRODUCTION

Welcome to the Cardihaler — a new way to understand and train your breathing

Most of us never think about how we breathe. Yet breathing is one of the most powerful regulators of stress, energy, focus, endurance, sleep quality, and emotional balance. The Cardihaler is designed to help you reconnect with this natural system by restoring something modern life quietly takes away: your body's tolerance and access to carbon dioxide (CO_2).

Why CO_2 Matters More Than You Think

For over a century, scientists have known that CO_2 is not a "waste gas" but a key player in oxygen delivery, nervous system balance, and cellular energy. Early respiratory pioneers like **Christian Bohr**, **John Scott Haldane**, and later **Yandell Henderson** of Yale and the Ukrainian professor **Konstantin Buteyko** all pointed to the same idea:



When CO_2 levels drop too low, the body shifts into stress mode — faster breathing, tighter muscles, reduced blood flow, heightened anxiety, and poorer endurance.

The Cardihaler is designed to allow users to practice controlled breathing exercises with adjustable CO_2 concentration settings, supporting structured CO_2 tolerance training.

Who the Cardihaler Is For

People use the Cardihaler for different reasons:

- Individuals interested in structured breathing exercises
- Those wishing to explore CO_2 tolerance training
- Athletes and practitioners incorporating breathing practices into their routines
- Individuals interested in relaxation-focused breathing practices
- Those seeking a greater sense of grounding, presence, and energy through breathing practice
- Those wishing to reconnect with a deeper, slower, more natural breathing rhythm

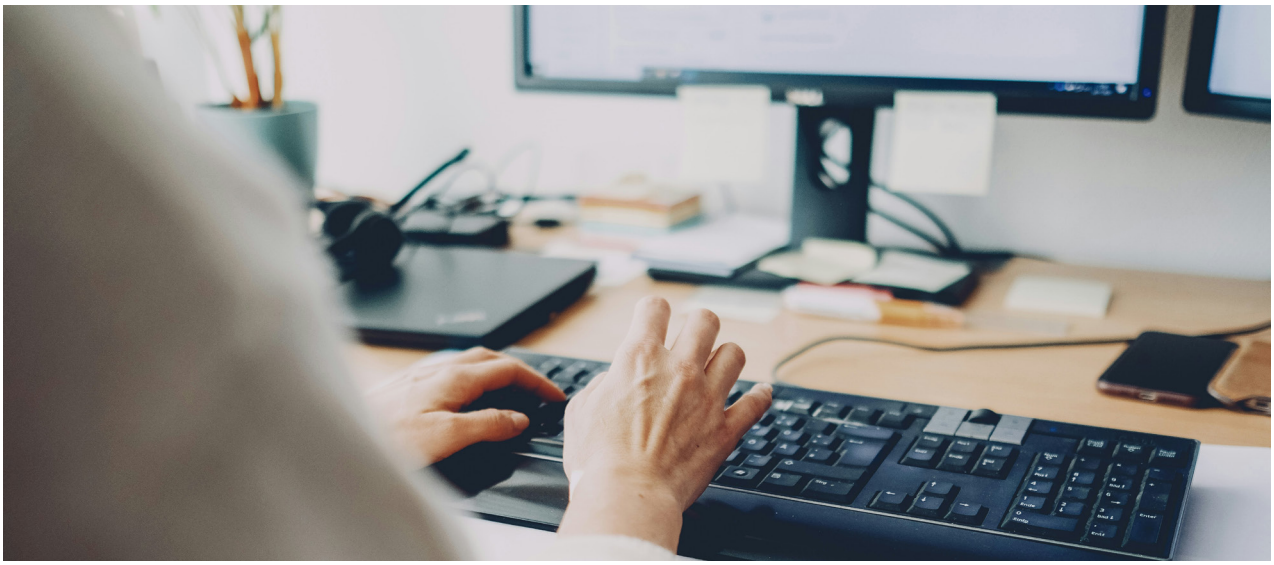
Whether you're an older adult wanting smoother breathing, an athlete aiming for better endurance, or someone simply looking for a calmer body and mind — the Cardihaler adapts to your needs with 20 adjustable levels from ultra-gentle to advanced.

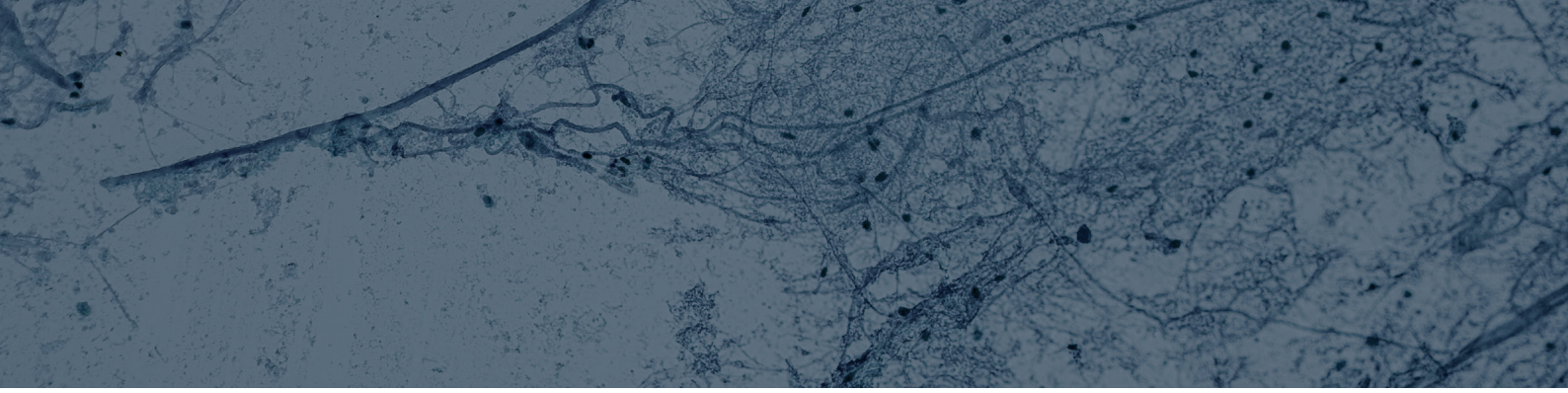
A Simple, Modern Way to Train Your Biology

The Cardihaler combines:

- Controlled CO_2 delivery
- Responsive touch-screen controls
- Stable, ultra-precise flow regulation
- USB-C powered portability
- Firmware updates for future features
- Cardistone for CO_2-infused water baths (face, feet, hands).

This manual will guide you step-by-step through setup, safe use, CO_2 science, protocols, troubleshooting, and advanced techniques.





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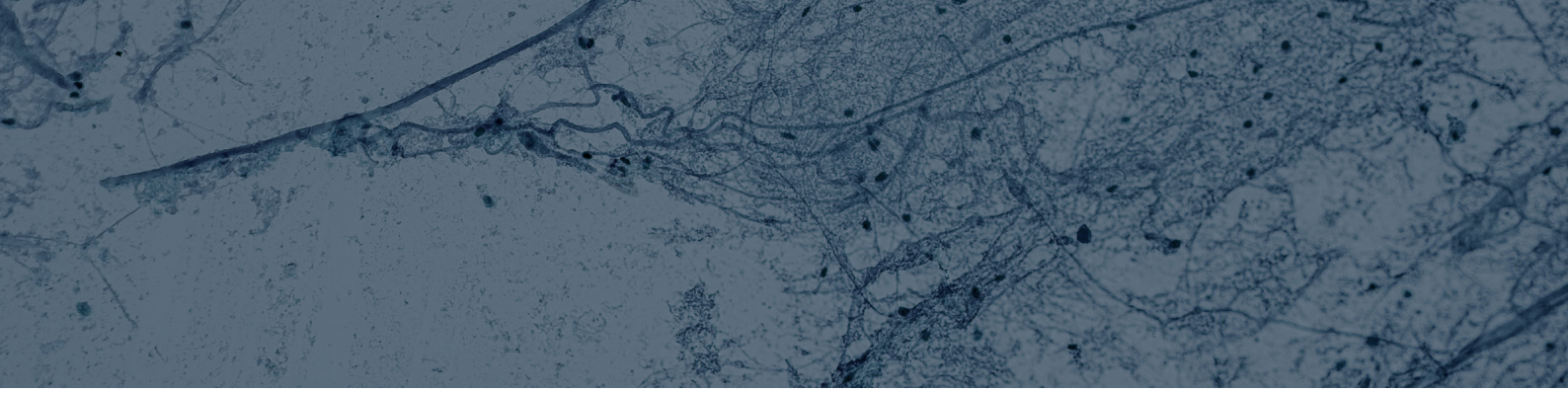


PRODUCT OVERVIEW

The Cardihaler is designed as a precise, user-friendly, and portable CO_2 breath trainer. This section outlines everything included with your device, its components, technical specifications, and compatible CO_2 sources.

What's in the Box

Your Cardihaler package includes:

- **1 × Cardihaler Main Unit**
  Touchscreen-controlled CO_2 delivery device with 20 adjustable levels.
- **1 × CO_2 Regulator (TR21x4)**
  Connects the device to a standard SodaStream Screw-In CO_2 cylinder.
- **CO_2 Adapter (included depending on region):**
  - EU orders: W21.8–14
  - USA orders: CGA320
  - Australia and New Zealand orders: both W21.8–14 and CGA320
- **CO_2 Cylinder Compatibility:**
  - Works with SodaStream Screw-In cylinders (For SodaStream Quick Connect, an adapter needs to be purchased separately)
  - Works with larger CO_2 cylinders (W21.8-14 and CGA320)
- **2 × Breathing Masks Size Large**
  Designed for comfort and optimal CO_2 distribution.
- **1 × USB-C Cable**
  Connects to a USB-C Power Delivery charger or compatible power bank.
- **1 × USB-C Power Delivery Charger (30W minimum)**
  Regional adapters included based on order location:
  - EU orders → EU + UK adapters
  - USA orders → EU + US adapters
  - Australia & New Zealand orders → EU + AU adapters

- **1 × Cardistone**
  For CO_2-infused water baths (face, feet, hands).
- **1 × Product Case**
  Protective, portable case for storing the Cardihaler and accessories.

Not Included:

- SodaStream cylinder(s)
- Power bank
- Larger CO_2 cylinders

Device Overview (Component Descriptions)

1. **Touchscreen Interface**
   - 3.5 inch touch screen (50% larger than previous model)
   - Adjust CO_2 levels 1–20
   - Start/stop sessions (1–20 minutes)
   - View session time and current level
   - Displays firmware update prompts

2. **USB-C Power Port**
   - Accepts USB-C PD (Power Delivery) only
   - Minimum 30W required
   - Compatible with PD power banks

3. **CO_2 Tank Connector (TR21x4 Regulator Connection)**
   - Connects to SodaStream Screw-In CO_2 cylinders
   - Adapters included for regional cylinder standards
   - SodaStream Quick Connect adapter is not included, but can be purchased separately

4. **Particle Filter**
   - Removes potential ice particles from high-pressure CO_2 output
   - Ensure smoother inhalation
   - Easily replaceable

5. **Breathing Output Port**
   - Connects to mask tubing
   - Delivers regulated CO_2-amounts
   - Designed for stable flow and comfort

6. **Mask & Tubing System**
   - Includes two high-quality masks
   - Adjustable fit
   - Designed for consistent CO_2 exposure

Technical Specifications

Case & Dimensions

- **Weight:** Approx. 2.4 kg
- **Dimensions:** 35 cm (W) × 30 cm (L) × 10 cm (H)

Power Requirements

- See page 13 for complete power specifications

CO_2 Delivery

- **Adjustable Levels:** 1–20
- **Approximate CO_2 Range:** ~0.5% to ~8.0%
- **CO_2 Regulation Precision:** 0.001 PSI (no drift)
- **CO_2 Consumption:**
  - ~40 sessions (4 minutes at Level 6) per SodaStream Screw-In cylinder (~3 hours total use)

CO_2 Level Mapping

Internal bench testing has validated the approximate relationship between Levels 1–20 and the corresponding inspired CO_2 concentrations (see Table below).

Level	PSI (Valve Output)	Delivered CO_2 (%) – Mean of 3×15 min Runs	Level	PSI (Valve Output)	Delivered CO_2 (%) – Mean of 3×15 min Runs
1	0.001	0.4%	**11**	0.035	4.7%
2	0.002	0.8%	**12**	0.04	5.2%
3	0.004	1.2%	**13**	0.045	5.5%
4	0.006	1.5%	**14**	0.05	5.9%
5	0.008	1.9%	**15**	0.055	6.4%
6	0.01	2.3%	**16**	0.06	6.8%
7	0.015	2.8%	**17**	0.065	7.2%
8	0.02	3.4%	**18**	0.07	7.4%
9	0.025	3.9%	**19**	0.075	7.6%
10	0.03	4.2%	**20**	0.08	8.0%

**These values are intended as general guidance only. Actual inhaled CO_2 may vary depending on individual breathing patterns, mask fit, leak around the face, nasal versus oral inhalation, breath-holding, swallowing, speaking, or other user-specific factors.*

Session Settings

- **Session Duration:** 1–20 minutes
- **Touchscreen Controls:** Yes
- **Firmware Updates:** Via the Cardihaler app

Operating Conditions

- **Temperature:** 10–40°C (50–104°F)
- **Humidity:** 10-90%

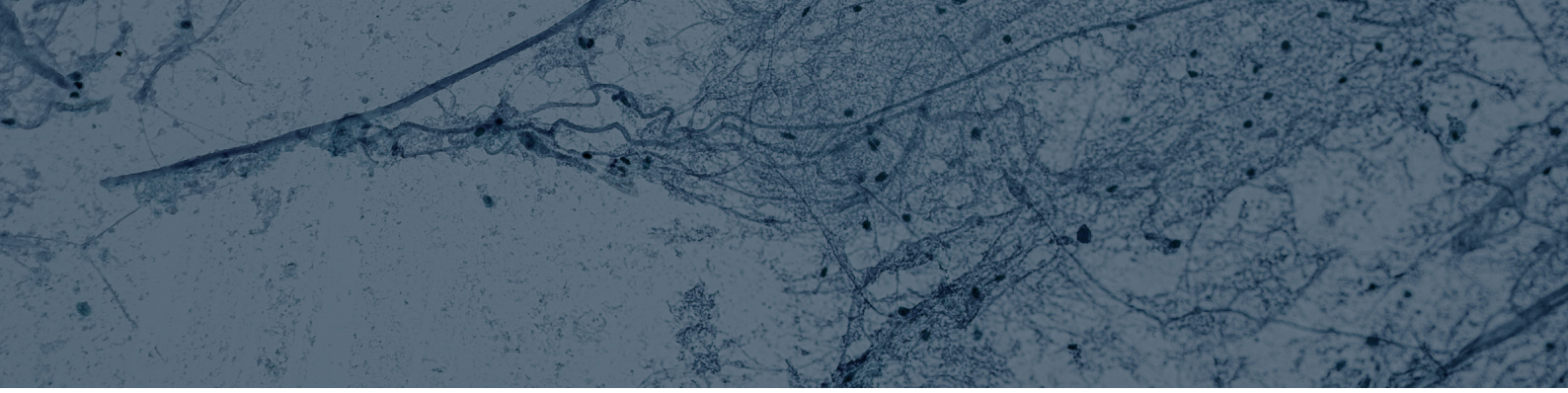
CO_2 Cylinder Compatibility

Supported:

- **SodaStream cylinders**
  - Screw-In
  - Quick Connect (adapter not included; can be purchased separately)
- **Larger CO_2 cylinders**
  - **EU/Rest of World:** W21.8-14. This thread size, 21.8mm diameter, 14 threads per inch, has different names in different countries
    - Germany: DIN477 No.6
    - Switzerland: SN 219505 No.7
    - United Kingdom: BS 341 Part 1 No.8
    - France: NF type C
    - Spain: ITC EP-6, Tipo C
    - The Netherlands: NEN 3268, RU 1
    - Italy: UNI 4406
    - Australian/Oceania Standard Type 30
    - Japan: JIS B 8246
  - **USA/Canada/Brazil:** CGA320
- TR21x4 regulator included
- Regional adapters included

Not Supported:

- Any non-threaded or proprietary connector types



SETUP & INSTALLATION

This section guides you through setting up your Cardihaler safely and correctly. Please follow each step carefully before your first session.

Before You Begin

Ensure you have:

- Cardihaler main unit
- TR21x4 CO_2 regulator
- Appropriate regional adapter:
  - **EU & ROW:** TR21x4 → W21.8-14
  - **USA/Canada:** TR21x4 → CGA320
  - **Australia/Oceania:** both TR21x4 → W21.8-14 and TR21x4 → CGA320
- SodaStream Screw-In cylinder or larger CO_2 cylinder
- USB-C to USB-C cable
- USB-C Power Delivery (PD) charger, 30W minimum (included)
- Breathing mask and tubing

Environmental requirements

- Operate in a well-ventilated area
- Keep device upright on a flat surface
- Keep away from heat or direct sunlight
- Operating Temperature: 10–40°C (50–104°F)
- Operating Humidity: 10–90%
- Storage Temperature: 0–40°C (32–104°F)

Power Requirements (Critical)

The Cardihaler **will not power on** with a standard USB charger.

✓ Required:

- USB-C Power Delivery (PD) charger as included
- 30W or higher
- Voltage range accepted by device: 12–20 V via PD
- Compatible with PD power banks

✕ Not compatible:

- Non-PD chargers
- USB-A adapters
- Low-watt mobile chargers
- “Fast chargers” without USB-PD standards

Important:

The included USB-C cable must be paired with the included USB-C PD 30W+ charger.

Connecting the CO_2 Cylinder

Step 1 — Identify your cylinder type

The Cardihaler supports:

- **SodaStream cylinders**
  - Screw-In
  - Quick Connect (adapter not included; can be purchased separately)
- **Larger CO_2 cylinders**
  - W21.8-14 (EU / Rest of World)
  - CGA320 (USA / Canada)

Step 2 — Attach the correct adapter for your region

- EU → W21.8-14
- USA → CGA320
- Australia → Both W21.8-14 and CGA320 adapters included; use the correct one for your cylinder

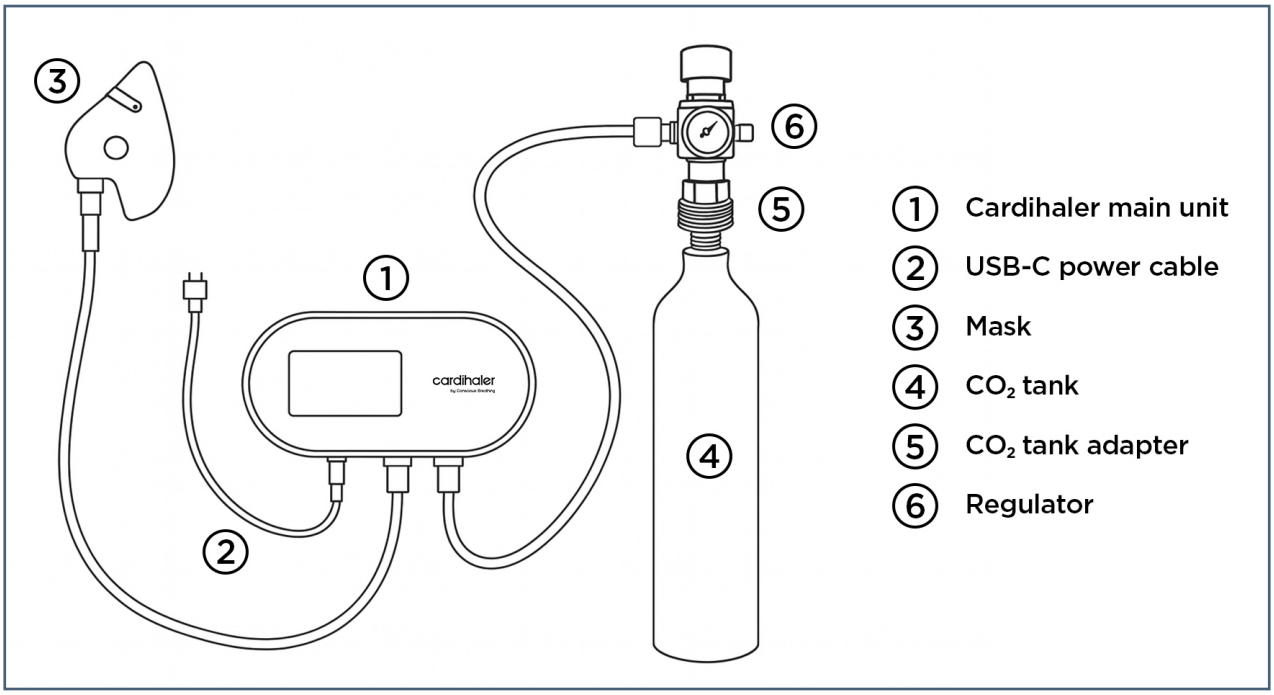
Hand-tighten first, then snugly tighten with the included Cardihaler wrench. Do not overtighten — this may damage the cylinder threads.

Step 3 — Attach the TR21x4 regulator

- Screw the regulator onto the adapter
- Tighten firmly (not excessively)
- Ensure no wobble or misalignment

Step 4 — Connect the inlet tubing

- Insert tubing from the regulator into the Cardihaler CO_2 inlet



Regulator Setup

Regulator setup is important for protecting the device and ensuring stable CO_2 delivery.

1. Close the CO_2 cylinder valve (turn clockwise)
2. Close the regulator knob (turn fully counterclockwise)
3. Open the CO_2 tank valve (counterclockwise)
4. Slowly turn the regulator knob (clockwise) until it reads **3–6 PSI**
   - Recommended: **~6 PSI** for general use
5. If pressure exceeds 9 PSI, release safely:
   - Close the CO_2 cylinder
   - Turn regulator fully off
   - Disconnect tubing from the regulator to release excess pressure

This prevents internal damage from high pressure.

Powering On the Cardihaler

1. Connect the USB-C cable to the included PD power adapter
2. Plug into a wall socket or power bank
3. Power on the device
4. Wait until the main screen is displayed

Connecting the Breathing Mask

1. Attach the breathing outlet tubing to the Cardihaler outlet port
2. Connect the mask to the tubing
3. Adjust the mask for comfortable, sealed fit
4. Do not overtighten straps or press the mask against your face
5. Ensure tubing is not kinked or twisted

Note:

Two masks are included. Masks are reusable for personal use.

Device Setup on First Use

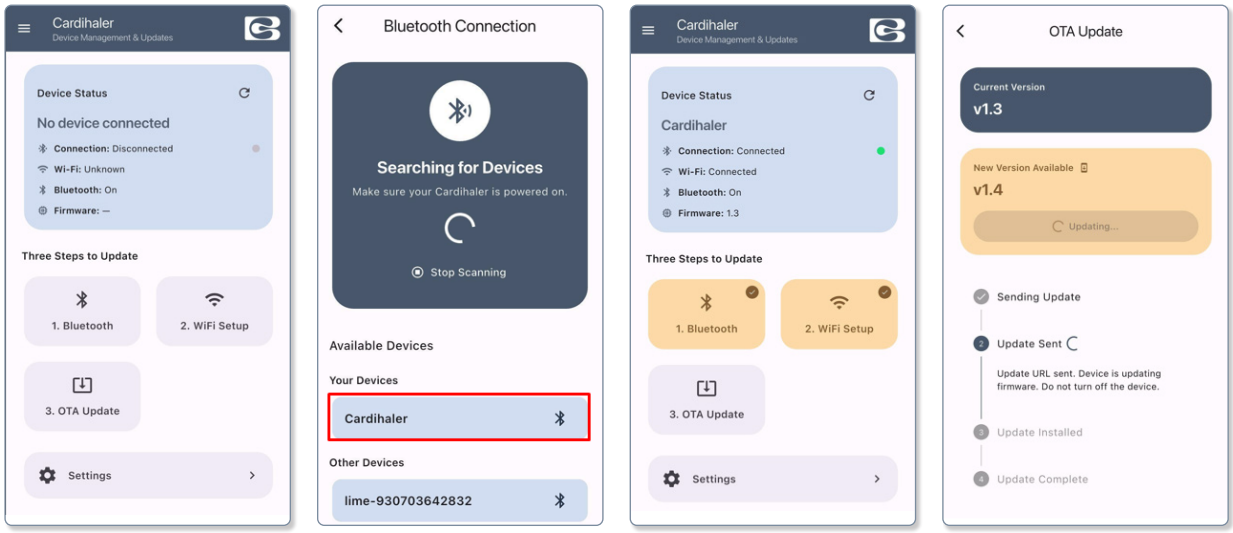
1. **Choose Inhale**
2. **Set session duration**
   - Use on-screen "+/–" controls
   - Range: 1–20 minutes
   - Recommended for beginners: **2–4 minutes**
3. **Select CO_2 level**
   - Levels 1–20
   - Approximate CO_2 % range: 0.5–8.0%.
   - Recommended starting levels: **2–6**
4. **Begin the session**
   - Put on mask
   - Press OK
   - Breathe normally in and out through your nose
   - If you feel uncomfortable, stop the session and resume at a lower level when you feel ready

Firmware Updates (Remote Updates)

Your Cardihaler supports firmware updates through the companion app ‘Cardihaler’.

To update:

1. Install the Cardihaler app on your smartphone via Google Play Store or Apple App Store
2. Plug in and turn on the Cardihaler unit
3. On your phone, make sure Bluetooth is turned on and you are connected to a Wi-Fi network
4. In the app, click on the Bluetooth symbol to connect to the Cardihaler unit
5. In the app, click on the Wi-Fi symbol to choose the network you wish to use for the update
    - Note: the device currently only supports 2.4GHz WiFi networks
6. Then click OTA to start the update
    - It will take a few minutes to complete the update

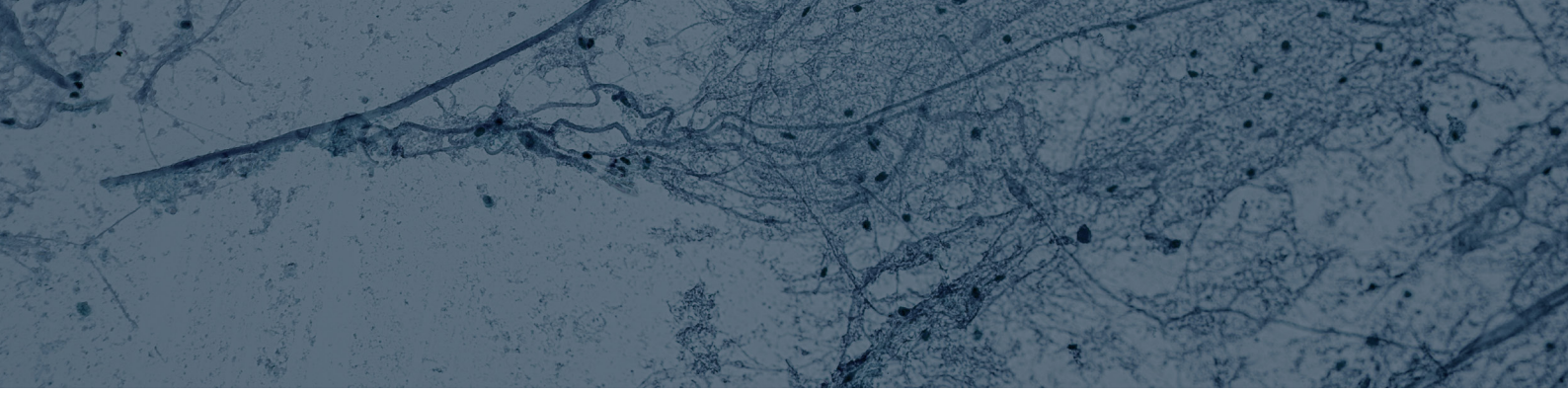


Why update?

- New features
- Interface refinements
- Bug fixes

First-Time Checklist

- ☑ Device powers on with PD charger
- ☑ Regulator set to 3–6 PSI
- ☑ Proper adapter installed (W21.8-14, CGA320, or Quick Connect) or Screw-In cylinder only
- ☑ Tubing connected securely in the correct outlet/inlet
- ☑ Mask fits comfortably
- ☑ Area is well-ventilated
- ☑ CO_2 level set low for first session
- ☑ No leaks detected (listen for hissing or test with soapy water)
  - For full leak-test procedure, see page 44



SAFETY INFORMATION

The Cardihaler includes multiple hardware and software safeguards and operates at low CO_2 pressures with regulated delivery. To ensure a safe and comfortable experience, review all safety guidance before use. If anything is unclear or you are uncertain whether the device is appropriate for you, consult a qualified health professional.

General Safety Overview

The Cardihaler delivers controlled, low-pressure CO_2 at tightly controlled amounts. It is intended for general wellness use, breathing practice, breath training, and CO_2 tolerance training, including relaxation, performance support, and breathing awareness.

The Cardihaler is a consumer wellness product and is not classified as a medical device. It is not intended to diagnose, treat, cure, or prevent any disease or medical condition.

Use only as instructed in this manual. If you have existing respiratory, cardiovascular, neurological, or other medical conditions, or if you are unsure whether this type of breathing practice is appropriate for you, consult a qualified healthcare professional before use.

Who Should Not Use the Cardihaler

Avoid using the Cardihaler unless cleared by a healthcare professional if you have:

- Respiratory disorders (e.g., COPD, severe asthma)
- Uncontrolled cardiovascular disease
- Serious neurological or autonomic disorders
- Panic disorder with severe hyperventilation symptoms
- Pregnancy (unless advised by a clinician)

Do not use it for children under the age of five.

Keep all components out of reach of children at all times.

Environmental Safety

Operating Environment

Use the device only in a well-ventilated room. CO_2 is heavier than air and may accumulate in enclosed or poorly ventilated spaces.

Avoid using the Cardihaler when sleeping or unattended and place it on a stable surface.

Temperature and Humidity

Parameter	Recommended Range
Operating Temperature	10–40°C (50–104°F)
Storage Temperature	0–40°C (32–104°F)
Humidity	10–90%

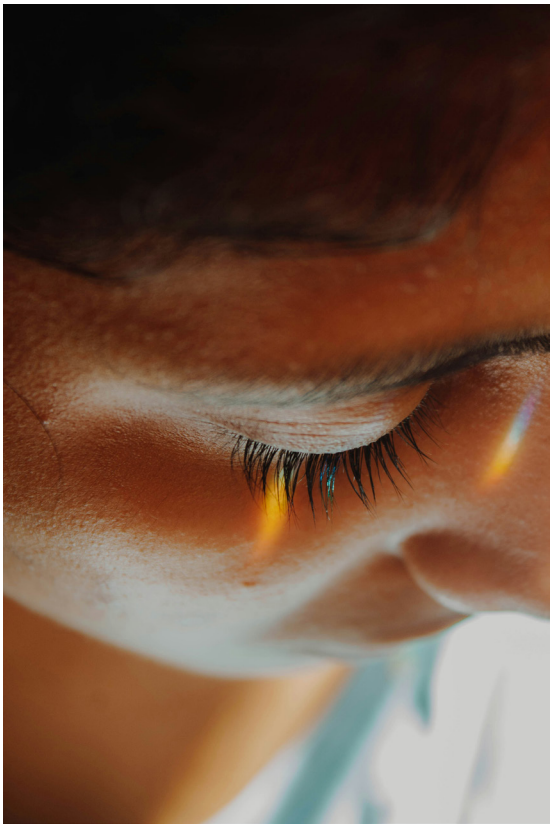
- Do not expose the device or CO_2 cylinder to temperatures above 40°C (104°F)
- Avoid direct sunlight, heaters, or heat sources

CO_2 Safety

CO_2 is safe when used properly. However, improper use may cause discomfort If you experience any of the following, stop the session:

- Dizziness
- Headache
- Light-headedness
- Shortness of breath or “Air hunger”
- Anxiety or uneasiness
- Nausea

Remove the mask and breathe fresh air.



CO_2 Leaks

In rare cases, leaks from the regulator or tubing can allow CO_2 to accumulate in a small room.

Signs of CO_2 buildup include:

- Rapid breathing
- Sudden dizziness
- Feeling faint
- Headache

Action:

1. Remove the mask
2. Turn off the cylinder
3. Ventilate the room
4. Only resume when fully aired out

Regulator & Cylinder Safety

The CO_2 cylinder is an external pressurized container from third-party manufacturers (SodaStream, Linde, Air Liquide, etc.). Safe handling is the user's responsibility.

Always:

- Use food/beverage or medical grade CO_2
- Keep cylinders upright and secure
- Close the tank valve after each session
- Store cylinders away from heat sources
- Avoid dropping, striking, or overheating the cylinder
- Ensure correct adapter use (W21.8–14, CGA320, or SodaStream Quick Connect)

Never:

- Use industrial/welding CO_2 (contains contaminants)
- Modify the regulator or adapters
- Exceed recommended regulator pressures (set 3–6 PSI only)

If any hissing or odor is detected, perform a soapy water leak test.

Device Safety & Internal Protection

The Cardihaler includes multiple layers of internal safeguards designed to control CO_2 delivery and protect the user.

Built-in Safety Systems

- Low-pressure CO_2 operation (~6 PSI)
- Medical-grade proportional valve with automatic fail-close
- Closed-loop feedback control for stable CO_2 delivery
- Automatic stop if abnormal pressure readings occur
- Particle filter for ice CO_2 micro-crystals
- Precision regulation to ±0.001 PSI
- Firmware checks

If the device detects irregular readings, it shuts the valve and halts operation.

Mask & Tubing Safety

- Inspect tubing and mask for cracks, blockage, or discoloration before each use
- Do not use kinked tubing
- Replace the mask or tubing if damaged
- Clean after each session, deep clean weekly
- For multi-user applications, each individual may use their own mask and tubing
- Never block or cover the mask vents

Symptoms & Reactions: What's Normal and What's Not

Normal Sensations During CO_2 Training	Warning Signs – Stop Immediately
• Alertness, mental clarity • Easier to breathe • More relaxed "calm energy" • Deeper and bigger breathing • Desire to sigh • Feels like inhaling carbonated water	• Dizziness or loss of balance • Chest discomfort • Strong air hunger • Nausea • Panic or strong anxiety • Persistent headache
Normal signs of CO_2 tolerance training	*Remove the mask and breathe fresh air*

Emergency Procedures

Situation	Symptoms/Indicators	Required Action
Mild Symptoms (most common)	Light discomfort, mild dizziness, slight air hunger, wired up	– Remove mask – Sit or lie down – Breathe fresh air – Use a lower CO_2 level next time
Severe Symptoms (rare)	Persistent dizziness, chest discomfort, strong air hunger, ongoing nausea or anxiety, hyperalert	– Turn off cylinder – Ventilate the room – Seek medical attention if symptoms persist – Discontinue use until medically cleared
Leak Suspected	Hissing, unusual odor, rapid breathing, sudden dizziness, or CO_2 buildup	– Evacuate the room – Ventilate fully before re-entering – Tighten all connections – Replace damaged tubing or fittings

Warnings & Disclaimers

The following restrictions apply to all users:

General Warnings

- Do not modify the Cardihaler
- Do not connect to unknown or improvised CO_2 sources
- Do not exceed recommended pressures or CO_2 levels
- Keep device components out of reach of children
- Use only in well-ventilated spaces
- Intended for wellness, training, and research—not medical treatment

Cylinder Responsibilities

- Users must follow all local regulations for CO_2 storage
- Follow the manufacturer's guidelines for all cylinders and adapters

UNDERSTANDING CO_2

Breathing is something we do more than twenty thousand times a day without thinking, yet it is closely connected to physiology and subjective experience. To understand why the Cardihaler works, it helps to revisit the role of a much-misunderstood molecule: carbon dioxide (CO_2).

Although often described as a "waste gas," CO_2 is one of the central regulators of human physiology. Every cell in the body produces it as a natural part of creating energy. It is not something the body is trying to eliminate — it is something the body is trying to *balance*. And that balance influences breathing patterns and oxygen release dynamics in the body.

Why CO_2 Matters More Than Most People Realize

In healthy physiology, CO_2 is constantly produced and constantly exhaled, but the level in your body at any given moment has a strong influence on many systems. When CO_2 is in a comfortable range, breathing becomes smoother and calmer, blood vessels relax, the brain receives steady oxygen delivery, and the nervous system tends to settle. When CO_2 drops too low — often through sedentary lifestyle and/or fast or habitual over-breathing — the opposite happens: breathing becomes more reactive, the chest and throat can feel tighter, thoughts speed up, and the body may shift subtly toward a stress-dominant state.

This is why a moment of emotional overwhelm is often accompanied by a quickened breath. It isn't simply a reaction to emotion; it is a shift in the delicate CO_2 balance that influences everything from your heart rate to your focus.

CO_2 Tolerance — Your Internal Breathing Sensitivity

The brain uses CO_2 levels as its primary signal for when to inhale next. The sensitivity of this system is known as **CO_2 tolerance**. People with a *lower* tolerance tend to feel "air hunger" sooner, breathe faster and open the mouth during mild activity, and may experience more fluctuations in calmness or endurance. Those with a *higher* tolerance usually breathe more steadily, lower, slower, rhythmically through the nose, feel calmer under pressure, and transition more easily between rest and activity.

Modern lifestyles often nudge CO_2 tolerance downward — long periods of sitting, constant stimulation, stress, and shallow breathing patterns can all encourage subtle over-breathing. The Cardihaler is designed to be used during breathing exercises that involve controlled exposure to different CO_2 levels.

A Short, Fascinating History

Interest in CO_2 is not new. Over a century ago, Danish physiologist **Christian Bohr** demonstrated something remarkable: CO_2 helps oxygen detach from haemoglobin so that it can actually be used by the body's tissues. This became known as the *Bohr Effect* — a foundational idea in respiratory science.

Around the same period, Scottish physiologist **John Scott Haldane** discovered that it is CO_2, not oxygen, that triggers our urge to breathe. This insight reshaped how scientists understood breathing regulation.

Another important but lesser-known researcher was South African physician **Frances M. Amos**, whose experiments in the mid-20th-century demonstrated how hyperventilation, which lowers CO_2, affects breathing patterns and physiological responses. Her work supported the idea that CO_2 levels are discussed as an important factor in breathing physiology.

Around the same time, **Prof. Konstantin Buteyko** explored the connection between chronic over-breathing, reduced CO_2 levels, and various breathing complaints, proposing that restoring normal CO_2 balance could improve comfort and calmness.

Today, free divers, endurance athletes, breathing coaches, and neuroscientists all work with the same basic principle: your ability to tolerate shifts in CO_2 strongly influences your physical and mental performance. The Cardihaler builds on this long scientific lineage — but with modern precision and simplicity.

CO_2, Stress, and the Nervous System

Breathing and the nervous system are inseparable partners. When CO_2 levels fall rapidly, the brain tends to interpret it as a signal to heighten alertness: muscles become slightly more tense, thoughts become sharper or more scattered, and the breath becomes faster. Conversely, when CO_2 rises gently, within a healthy range, the whole system often settles. Blood vessels widen, airflow feels smoother, and the mind becomes less reactive.

This is why practices like slow breathing, meditation, and certain yoga techniques emphasize slower breathing rhythm or longer exhales: they naturally elevate CO_2 slightly and help the nervous system shift toward calm. The Cardihaler provides a structured environment for breathing exercises that explore these principles.

The Bohr Effect — Your Oxygen Efficiency Switch

One of the most striking scientific insights into breathing comes from the Bohr Effect. Instead of thinking "more oxygen equals more oxygen to tissues," the Bohr Effect shows that oxygen delivery depends on CO_2 being present in the right amount.

When CO_2 levels are too low, oxygen binds too tightly to haemoglobin and is not released efficiently — like a delivery truck that refuses to unload its cargo. When CO_2 rises into its natural, healthy range, haemoglobin releases oxygen more freely.

This explains why CO_2 levels are an important factor in oxygen release within the body. No increased oxygen intake is required.

CO_2 in Athletic Performance & Recovery

Athletes have intuitively understood CO_2 training for decades. Free divers often spend more time improving CO_2 tolerance than oxygen capacity because the sensation that "I need to breathe" is triggered by rising CO_2, not falling oxygen.

The Cardihaler allows repeated exposure to controlled breathing conditions. By adjusting levels gently over time, users can explore CO_2 adaptation at a pace that fits their goals.

How the Cardihaler Uses This Science

The Cardihaler brings these principles together in a controlled environment. By adjusting inhaled gas composition, the device creates breathing conditions that users may perceive differently. The touchscreen lets you adjust levels depending on how you feel, while the device's precision regulation ensures smooth, predictable delivery.

Sessions are intentionally short, usually between one and twenty minutes, allowing small, consistent nudges to your CO_2 tolerance rather than dramatic changes. Over time, these sessions help build a breathing system that is calmer, more efficient, and more resilient.

The included Cardistone extends this concept locally, allowing hands, feet, or the face to be immersed in CO_2-infused water for localized sensory experience.

CO_2 in One Clean Picture

If you were to summarize CO_2 in a single idea, it would be this:

CO_2 is not a waste product. It restores flow by reducing friction and resistance. It is a regulator. A door opener. A guide for how calmly and efficiently your body can breathe, move, and recover.

CO_2 balance plays an important role in breathing physiology and oxygen transport in the body.

The Cardihaler provides a structured way to explore breathing exercises related to CO_2 tolerance with clarity and precision.

USING THE CARDIHALER

This section provides a simple overview of what a typical Cardihaler session feels like once your equipment is assembled. It describes the flow of use from start to finish and offers practical guidance to help you get the most out of each session.

Starting Your Session

Once your device, regulator, tubing, and mask are set up, put on the mask and sit comfortably. Breathe normally in and out through your nose as the session begins and during the whole session. The Cardihaler gradually introduces the selected level of CO_2, allowing you to settle into a relaxed, steady breathing rhythm.

For most users, it is normal to start with shorter sessions and lower levels, adjusting gradually as comfort increases.

During the Session

A Cardihaler session should feel mainly calm and controlled. Many users notice sensations such as warmth, tingling, or mild air hunger. Sensations vary by individual and session. These effects are part of the intended response as your body adapts to the CO_2 stimulus.

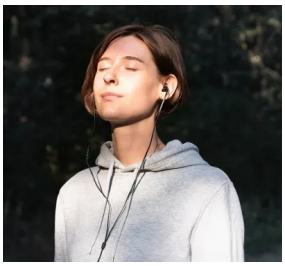
Pay attention to how you feel. If the selected level feels too strong, you may reduce the intensity or pause the session. Sessions are most effective when you remain mainly relaxed and comfortable.

Ending the Session

When your session time finishes, remove the mask and breathe room air normally. Allow a moment for your body to settle. Turn off the device and close the CO_2 cylinder valve. Disconnecting tubing and storing equipment can be done according to your normal routine.

After the Session

Most users experience a sense of calm, improved breathing rhythm, or enhanced recovery. If you feel light-headed or uncomfortable, rest until symptoms pass and consider using a lower level next time.



Over time, as tolerance and familiarity increase, you may explore longer durations or higher levels according to your training goals.

TRAINING PLANS & PROTOCOLS

Training with the Cardihaler works best when approached gently, gradually, and with awareness of how your body responds from day to day. Conscious Breathing principles emphasize that the body adapts more effectively to small, consistent changes than to large jumps in intensity.

As Anders Olsson teaches throughout his programs:

> "The body adapts best to small, repeated exposures."

and

> "It is better to do a little every day than to do a lot once in a while."

This is the foundation of the "less is more" approach to CO_2 training. If you are unsure whether to increase or decrease intensity, choose the gentler option. In general, if you feel uncomfortable, stop the session and resume at a lower level when you feel ready.

Before & After Tests

Many users enjoy noticing how their body responds before and after a Cardihaler session. These simple checks are optional awareness tools commonly used in breathing programs to notice subjective sensations before and after a session.

Simple Awareness Checks

Nasal Ease Test	Notice whether nasal airflow feels smoother or more open after the session.
Breathing Ease Check	Observe whether your breathing feels calmer, slower, or lower.
Calmness Score (1–10)	Rate your mental state before and after.
Tension Scan	Check for changes in neck, jaw, or shoulder tension.

Physical before/after tests

These tests can be used before and after using the Cardihaler to notice differences in subjective sensations related to movement and breathing. Ideally, choose three to four exercises and perform them in the exact same way each time. For example, if you test while sitting, the retest should also be done while sitting. These tests can be used before and after using the Cardihaler to notice differences in subjective sensations related to movement and breathing.

More important than numbers or performance is how the exercise feels: Use these three guiding questions as your main "rating system" for all tests:

1. **How do you breathe during the exercise?**
2. **How do you feel — calm, neutral, or stressed?**
3. **Where do you notice tension — and how much?**

These questions help you reflect on your experience during the exercises rather than focusing on numbers or performance. They help you notice how the exercise feels and whether the selected CO_2 level feels appropriate for you.

1. **Neck and Shoulder Stress - Inner rotation and outer rotation.**
   - The whole arm is lifted to 90 degrees to the side, with the forearm bent down 90 degrees. Rotate up and down.

     Passive: The client (a) sits upright. The coach (b) lifts the client's arm next to the body to 90 degrees and lightly supports the arm under the

elbow. The forearm is bent, and the coach passively tests the internal rotation - meaning without any help from the client - to see how far the arm drops down. The same is done in the other direction (external rotation).

- Pay attention to range of motion, tension patterns, and differences between right and left. How is the movement performed - calm, rushed, clean, stressed?

Active: The client can perform the same test on their own but should make sure to keep the arm relaxed while letting it hang.

Test → Use the Cardihaler → Repeat

2. Range of Motion: Arm Rotation

Sitting or standing, lift both arms in front of the body at chest height. Then alternately rotate the right and left arm away from the center as far as possible. One arm stays extended forward while the other rotates. Try to avoid moving the spine.

- Pay attention to range of motion, tension patterns, and differences between right and left. How is the movement performed - calm, rushed, clean, stressed?

Test → Use the Cardihaler → Repeat

3. Stretch: Hands to Floor

Try to reach the floor with your hands while keeping your legs straight.

Stand upright; the knees can be slightly bent. Bend the upper body forward and try to touch the floor with your hands.

- Pay attention to range of motion, tension patterns, and differences between right and left. How is the movement performed - calm, rushed, clean, stressed?

Test → Use the Cardihaler → Repeat

4. Coordination: Pistol To Peace

With one hand, show a peace sign away from your body. With the other hand, form a pistol shape pointing toward the peace sign. Then alternate the finger positions back and forth.

- Pay attention to range of motion, tension, and differences between right and left. How is the movement performed - calm, rushed, clean, stressed?

Test → Use the Cardihaler → Repeat

Access to Additional Tests

The full Conscious Breathing test library includes additional balance, strength, mobility, coordination, and visual awareness tests. These are used in workshops and instructor programs.

A complete list is available by participating in our CO_2 Training Course.

Notes on Interpreting Results

Sometimes Results May Worsen — This Can Be Normal

Before- and after-tests are meant to help you notice subjective sensations related to calmness, coordination, and breathing comfort. However, it is normal that results do not always improve. Just like physical exercise, CO_2 training introduces a new breathing stimulus, and occasionally this may feel more demanding on some days.

This does **not** mean something is wrong. It is simply a sign that you are exploring your current limits, just as in any other form of training.

The key is to find the right dose: If a session leaves you feeling slightly tired, unbalanced, or stiff, this can be part of the normal training response. If results consistently feel worse, reduce intensity, shorten duration, or take a rest day.

Before/after tests are not about achieving perfect numbers — they are about supporting gentle and sustainable training decisions.

Getting Started — First Sessions (Week 1)

Your early sessions should focus on familiarity, comfort, and learning the sensations of mild CO_2 exposure. A slow beginning creates a stable foundation.

Recommended starting point:

Parameter	Recommendation
Duration	2-4 minutes
CO_2 Level	Level 2–4
Frequency	Once every other day
Position	Sitting or lying down
Breathing	Calm, relaxed nasal breathing

- In the first few days, the experience may feel subtle. Some users notice different breathing sensations, changes in alertness, or mild 'air hunger'. Others feel almost nothing. Either response is normal.
- If a session feels smooth and easy, repeat the same settings for several days before increasing. If it feels strong—or if you feel dizzy, uneasy, or tired afterward—reduce the CO_2 level and duration next time.
- This first week is about learning your personal sensitivity.

Gentle Progression — Weeks 2–3

As you grow more comfortable, you may gradually extend either duration or CO_2 level, but preferably not both at once.

A typical, comfortable progression looks like this:

Week	Suggested Duration	Suggested Level	Notes
Week 2	**2–4 minutes**	**Level 2–4**	Once every day. Continue only if early sessions felt smooth
Week 3	**4–5 minutes**	**Level 2–4**	Adjust based on sensations

At this stage, the aim is to begin exploring slightly deeper CO_2 exposure while still feeling in control and comfortable. Also, explore doing the session at different times during the day to notice when it feels most beneficial, for example in the morning or in the evening to notice how the timing of sessions affects your experience.

Finding Your Sweet Spot — Weeks 4–5 and Beyond

Once the first three weeks feel natural, you can gently move into slightly longer or more stimulating sessions.

A structured example:

Week	Suggested Duration	Suggested Level	Notes
Week 4	**4–5 minutes**	**Level 4-6**	Smooth, rhythmic breathing is key
Week 5	**4–5 minutes**	**Level 4–8**	Only increase if fully comfortable

During this phase, many users begin to recognize their own "sweet spot," where sessions feel effective without discomfort.

This "sweet spot" is not about intensity; it's about consistency and how the session feels. If increasing the level stops feeling good, simply go back down.

If You Experience A CO_2 Surge

Some users may experience a brief sensation of increased CO_2, like a sudden surge. This is not caused by the device, which delivers a steady and controlled flow of CO_2, but is related to individual sensitivity and breathing behavior.

If this happens, try the following:

- Use a lower level
- After starting a session, wait 10-15 seconds before putting on the mask
- Hold the mask slightly away from the face for the first few breaths
- Pay attention to your breathing pattern. A CO_2 surge often coincides with breath holding, swallowing, or very slow breathing.
- If you need to swallow, briefly remove the mask, then resume breathing normally

This usually resolves the sensation quickly and makes the session more comfortable.

Sensitive Users — Ultra-Gentle Approach

Some individuals benefit from an even softer entry. This includes people who:

- Have unusually low baseline CO_2 tolerance
- Are recovering from high stress
- Have been ill
- Feel easily overwhelmed in early sessions

For these users:

Parameter	Starting Point
Duration	30 seconds - 1 minute
Level	Level 1–2
Frequency	Every second day

Small increments—such as 30 seconds, then 60 seconds—work better than larger jumps. It is better to increase the duration and frequency before increasing the CO_2 level.

For Users Who Feel "Nothing" at First

A portion of users experience almost no immediate sensations at lower levels—and this is completely normal. Adaptation can be quiet.

If after 5–7 days you feel little or nothing, you may try:

- a slightly longer session
- a small increase in CO_2 level
- moving the session earlier in the day
- using two short sessions spaced apart

Even when the session feels neutral, changes in breathing comfort or CO_2 tolerance may be noticed gradually.

Sensation Guide — What's Normal vs. Too Much

A summary of common reactions and how to adjust:

Sensation	Interpretation	Adjustment
Mild air hunger or urge to breathe	Normal early adaptation	Continue or reduce CO_2 level slightly
Gentle warmth, flush, or tingling	Common and expected	Safe; continue if comfortable
Slightly faster heartbeat	Not unusual	Lower CO_2 level if distracting
Dizziness, strong air hunger, or panic	Too intense today	Stop session; reduce CO_2 level next time
Headache that persists	Too much intensity	Stop; resume at lower CO_2 level next time

You should always feel in control. If anything feels "off," stop the session immediately and breathe room air until you feel normal again.

When to Pause or Reduce Intensity

Pause or scale back training on days when you feel:

- fatigued
- stressed
- poorly rested
- unusually reactive to the CO_2

This is normal, and sensitivity can vary day by day. Returning to gentle settings usually resolves the issue.

Simple Formula for Designing Your Own Routine

Most users eventually develop their own rhythm using this three-question check-in:

1	How do I feel today?
2	Do I want a short, medium, or long session?
3	Which level felt good last time? Should today be the same, lower, or slightly higher?

There is no perfect program. Progress comes from consistency, not force.

Summary — The Principles of Safe Training

- Start gently, increase gradually, and adjust based on comfort
- Do not increase duration and level at the same time and always stop if something feels wrong

This unified protocol reflects all internal guidance and user experience data, ensuring a simple, safe, and adaptable training journey with the Cardihaler.

TROUBLESHOOTING (TECH + CO_2)

Even with precise engineering and stable CO_2 regulation, small issues may occasionally arise—from tubing not being fully seated, to power supply mismatch, to natural reactions during CO_2 adaptation. This section helps you identify what is happening and how to resolve it quickly and safely.

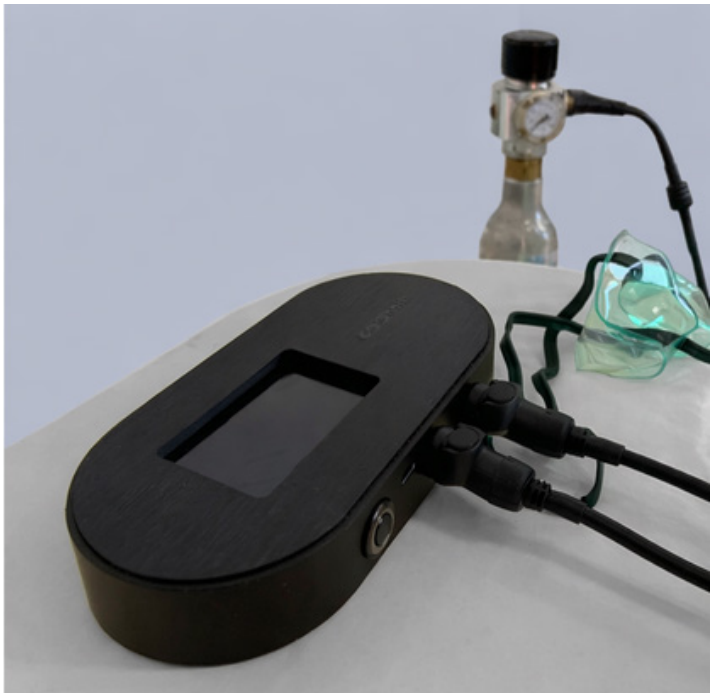
Troubleshooting is divided into two parts:

1. **Technical Troubleshooting** — device, power, regulator, tubing, firmware
2. **CO_2 Sensation Troubleshooting** — reactions during training and how to adjust

Use this section whenever something doesn't feel or function as expected.

Technical Troubleshooting

Technical issues usually fall into a few simple categories: power, pressure, tubing, regulator/cylinder, or firmware.



Quick Diagnostic Table

Symptom	Likely Cause	Fix
Device will not turn on	Non-PD charger or <30W power	Use included USB-C PD 30W+ charger
Device turns on but shuts off	Weak power bank, faulty cable	Try a different PD charger or the included cable
No CO_2 flow / weak flow	CO_2 cylinder empty, regulator closed, or pressure below 3 PSI	Open cylinder valve; adjust regulator to 3–6 PSI
Sudden strong flow	The regulator opened too far	Reduce regulator pressure; reset to 3–6 PSI
Gas leaks at cylinder	Loose adapter/regulator threads	Tighten connections using wrench; use soapy water test
Hissing near tubing	Tubing not fully inserted	Reseat tubing firmly at both ends
Ice particles in tubing	Cylinder very cold; high flow	Allow cylinder to warm; check particle filter
Touchscreen unresponsive	Condensation, static, glove use	Wipe gently; use bare fingers
Firmware update not working	App not connected	Reconnect via app; ensure stable power

Power Issues

The device will not turn on

The most common reason is using a charger that does **not** support USB-C Power Delivery.

Check the following:

1. The charger supports **USB-PD** (as included or certified product)
2. Output is **30W or higher**
3. You are using the **included USB-C cable** (or another PD-capable cable)
4. The power bank (if used) supports PD output

If the device still does not start, try another PD charger before assuming something is wrong with the unit.

CO_2 Flow Issues

No CO_2 is flowing

- Cylinder valve may be closed
- Regulator knob may be turned down fully
- Tubing may not be inserted correctly

Fix:
Open cylinder → turn regulator to **3–6 PSI** → verify tubing
Flow feels weak or unstable

- Regulator set below 3 PSI
- Cylinder may be nearly empty
- Tubing may be kinked

Fix:
Adjust pressure → straighten tubing → check for leaks

Regulator or Cylinder Issues

Hissing sound at the connection

This usually indicates:

- A loose regulator
- Loose adapter threads

Fix:
Tighten gently with the included wrench.
Perform a **soapy water test** to confirm.

Pressure spikes above 9 PSI

- Regulator was opened too far
- Cylinder valve opened too quickly

Fix:
Close cylinder → turn regulator down → release excess pressure by disconnecting tubing → reconnect and set pressure properly.

Ice particles in tubing
CO_2 expands rapidly and can create small ice crystals.

Fix:

- Use the built-in particle filter
- Let the cylinder warm slightly before the next session

Tubing & Mask Issues

CO_2 smell or odd taste

Usually caused by:

- Old tubing
- Moisture inside tubing
- Impurities from cylinder valve interface

Fix:
Clean or replace tubing. Ensure that the cylinder valve and regulator connection are clean.

Firmware & App Issues

If firmware updates fail:

- Ensure the device is powered by a stable PD charger
- Make sure the phone is close to the device
- Restart the app
- Try again after resetting Bluetooth/WiFi

CO_2 Sensation Troubleshooting

Technical function aside, sometimes the **body's response** to CO_2 is the part that needs troubleshooting. This section helps you adjust your training safely and calmly.

Quick Sensation Guide

Sensation	Meaning	Action
Mild warmth or facial flush	Normal early adaptation	Continue at same level
Tingling in fingers	CO_2 rising; normal	Continue or lower slightly
Slight air hunger	Breathing reflex activation	Reduce level next session
Faster or heavier breathing	CO_2 stimulation	Lower level; shorten duration
Light-headedness	Too intense today	Stop immediately; resume next time lower
Panic, strong air hunger	Far too strong	Stop; reduce drastically next session
Headache after session	Intensity too high	Shorter + lower level next time

If You Feel Discomfort During a Session

1. Stop the session
2. Remove the mask
3. Breathe fresh air
4. Sit or lie comfortably
5. Resume another day at a gentler setting

If You Feel "Nothing" During a Session

This is common, especially at lower CO_2 levels. Try one of the following:

- Increase duration slightly
- Increase CO_2 level gradually
- Move your sessions earlier in the day
- Add a second short session for experimentation

If Effects Feel Too Strong Later in the Day

Some users feel after-effects such as tiredness or sensitivity.
Respond by:

- Taking a day off
- Reducing the next session to a lower level
- Reducing the next session to a shorter duration

This usually resolves the issue.

The “Balance Rule”

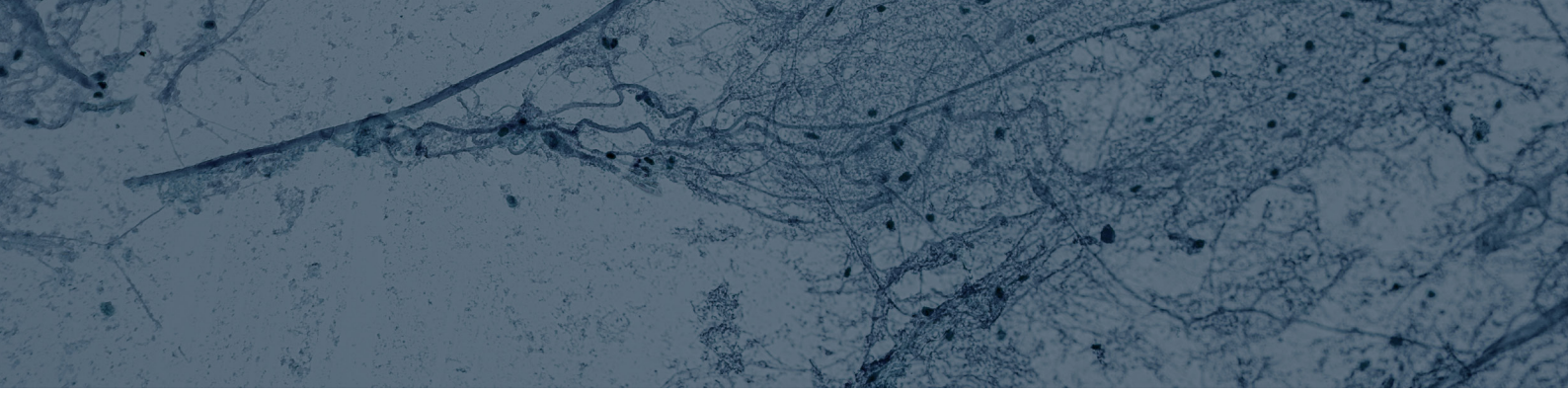
Never increase level and duration at the same time. Increase only one variable at a time, based on comfort.

When to Seek Support

Contact support if:

- You suspect a regulator defect
- You cannot maintain steady pressure despite adjustments
- The device does not start even with the correct charger
- Tubing connections consistently leak
- Firmware cannot be updated despite multiple attempts

Support information can be found in page 50.



CARE, CLEANING & MAINTENANCE

The Cardihaler is designed to require minimal maintenance. Most care involves simple cleaning of external parts and keeping components stored properly so they remain in good condition. Follow the guidelines below to ensure long-term performance and hygiene.

General Handling & Storage

Treat the Cardihaler as a precision instrument.

- Keep the device in its protective case when not in use
- Store at room temperature in a dry, ventilated area
- Avoid direct sunlight, heat sources, or high humidity.
- Do not expose the device or CO_2 cylinder to temperatures above 40°C (104°F) or below 0°C (32°F)
- Always close the CO_2 cylinder valve fully after each session
- Turn the regulator knob down after closing the cylinder

Never attempt to open the Cardihaler housing. There are no user-serviceable internal components.

Cleaning the Breathing Mask

Your mask will collect moisture during use and should be cleaned regularly.

After Each Session

- Wipe the inner surface with a soft, lightly damp cloth
- Avoid harsh chemicals or soaps
- Allow the mask to air-dry completely before storing

Weekly Deep Clean

1. Detach mask from tubing
2. Rinse gently with warm water and mild, non-perfumed soap
3. Rinse thoroughly and allow it to dry fully

Replace your mask if it becomes discolored, stiff, cracked, or uncomfortable

Cleaning & Inspecting Tubing

Tubing should remain flexible and clean.

- Check for kinks or bends before use
- Replace if tubing becomes brittle, opaque, or damaged
- Rinse weekly with warm water if moisture builds up
- Allow to dry fully before reconnecting

Never use tubing that appears cracked, pinched, or loose-fitting.

Regulator & Adapter Care

The TR21x4 regulator and its regional adapters (W21.8-14 or CGA320) require simple but regular checks:

- Keep threads clean and free from debris
- Wipe metal surfaces with a dry cloth
- Always use the included wrench gently—avoid overtightening

If you hear any hissing or see bubbles during a leak test, do not use the system until the connection is secure.

Device Body Cleaning

- Wipe the external surface with a dry or barely damp cloth
- Never allow liquid to enter ports or buttons
- Do not use alcohol, solvents, or abrasive cleaners
- Make sure the device is unplugged before cleaning

Checking for Leaks (Recommended Weekly)

A quick leak check helps ensure safety.

1. Mix a small amount of dish soap with water
2. Apply gently around regulator and adapter connections
3. Look for small bubbling or foam movement
4. If bubbles appear → close cylinder immediately, tighten fittings, and retest

If leaks persist even after tightening, stop using that cylinder or adapter until inspected or replaced.

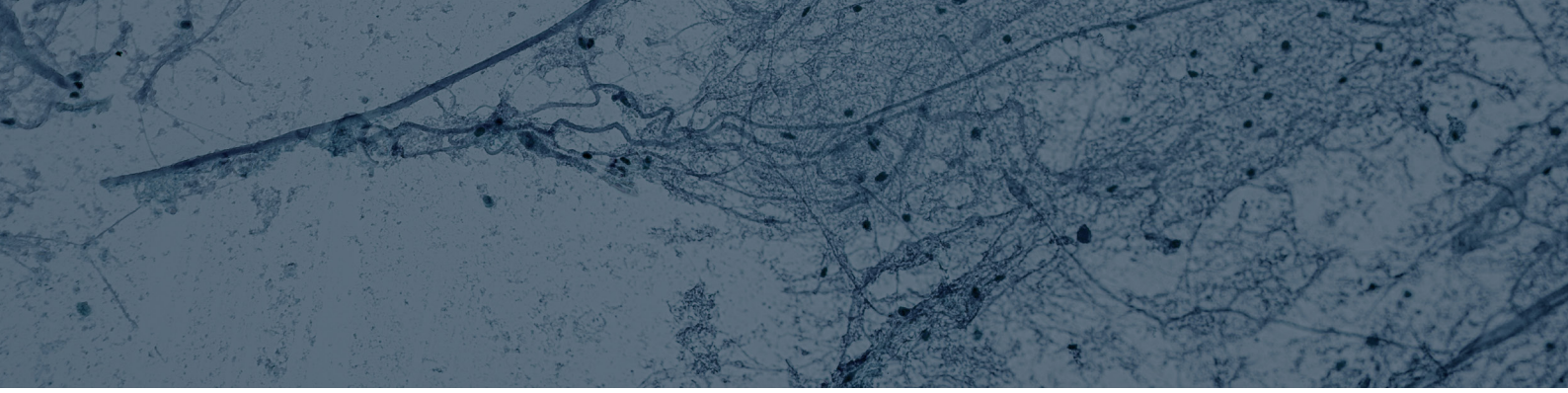
Long-Term Maintenance

The Cardihaler requires no lubrication, internal cleaning, or calibration by the user.

To maintain longevity:

- Keep the device dry
- Use only SodaStream Screw-In, Quick Connect, or large CO_2 cylinders and included adapters
- Handle with care during transport
- Use the included USB-C PD 30W+ charger only

If the device behaves irregularly (power issues, flow interruptions, abnormal noise), refer to Troubleshooting or contact support.



CARDISTONE ACCESSORY

The Cardistone is an accessory designed for localized CO_2 water exposure. It allows users to infuse water with controlled amounts of CO_2 for targeted applications such as hands, feet, or facial immersion. For water use, the Cardistone should be connected directly to the CO_2 regulator using the dedicated tubing setup described below.

What the Cardistone Does

The Cardistone disperses CO_2 into water to create a gentle, CO_2-infused bath. CO_2 water exposure can produce a tingling or warming sensation as dissolved CO_2 interacts with the skin. Many users find this experience relaxing and comfortable in the immersed area.

> The Cardistone is an external diffuser and does not affect the internal operation of the Cardihaler.

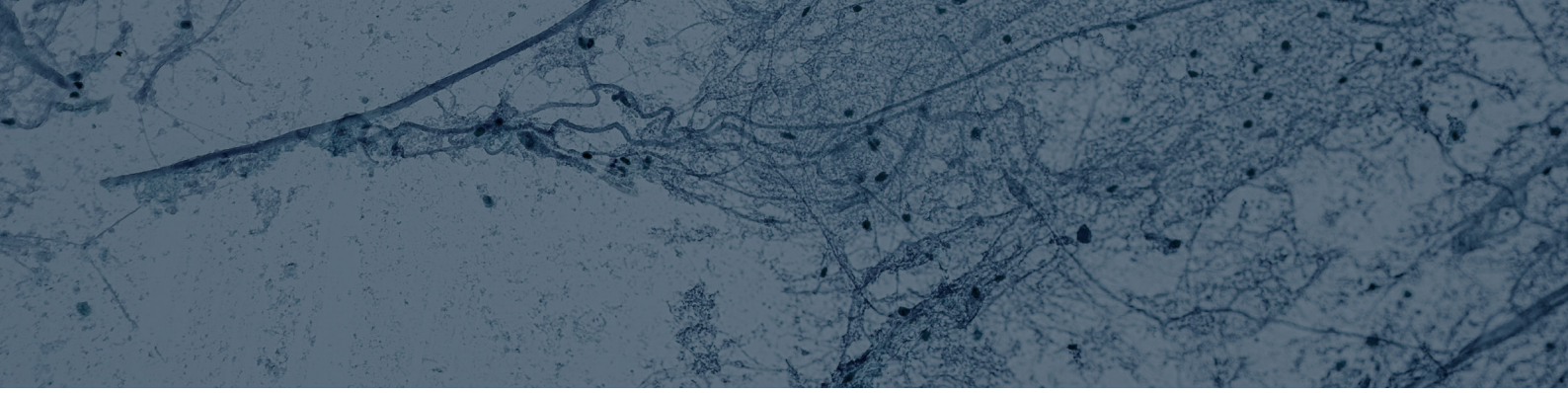
How to Use the Cardistone

1. Fill a container with cold or room-temperature water.
2. Use the dedicated Cardistone tubing (the separate silicone tube supplied without a quick-connect fitting).
3. Connect one end of this tubing directly to the CO_2 regulator outlet.
4. Attach the other end of the tubing to the Cardistone.
5. Place the Cardistone fully underwater, ensuring it is completely submerged.
6. Slowly open the CO_2 regulator and adjust the flow to achieve your preferred bubble intensity.
7. Immerse the target area (hands, feet, or face) for the desired duration.
8. When finished, close the cylinder valve/regulator before removing the Cardistone from the water.
9. Disconnect the tubing and hang it vertically to air dry completely before storing.

The Cardihaler unit must not be part of the system during water use.

Safety Notes for Water Use

- Keep the Cardihaler main unit dry at all times
- Use cold or room-temperature water only
- Ensure the Cardistone is fully submerged before opening the regulator
- Do not connect the Cardistone through the Cardihaler unit during water sessions. Always connect the Cardistone directly to the CO_2 regulator using the regulator-based tubing setup.
- After use, hang tubing vertically and blow gently through it to clear any moisture before storage
- Do not immerse tubing connectors, device ports, or the Cardihaler unit in water.
- Discontinue use if any unusual sounds, blockages, or irregular flow are observed
- **Damage resulting from liquid entering the Cardihaler unit is not covered under warranty.**



TECHNICAL SPECIFICATIONS

The Cardihaler is built around a low-pressure CO_2 delivery system with precise electronic regulation. The specifications below reflect only what appears in your uploaded documents, updated with the confirmed CO_2 range and pressure values.

Dimensions & Power

The Cardihaler housing measures 35 × 30 × 10 cm and is powered exclusively through USB-C Power Delivery (PD). The device accepts 12–20 V through a PD-compatible charger delivering 30 W or higher.

There is no mains voltage inside the device — only low-voltage DC power.

CO_2 Delivery & Pressure Control

The external TR21x4 regulator provides gas to the device at a controlled low pressure. Based on documented values:

- **Operating pressure:** 3–6 PSI
- **Typical setting:** ~6 PSI
- **Regulator safety upper limit:** 9 PSI

A medical-grade proportional valve ensures stable delivery and automatically defaults to the closed position if any hardware or firmware fault occurs.

Operating Parameters

Parameter	Specification
CO_2 Range	Approx. 0.5–8.0%
CO_2 Levels	1–20
Session Duration	1–20 minutes
Working Pressure	3–6 PSI
Max Regulator Output	9 PSI

Filtration & Replaceable Components

A high-efficiency particle filter sits between the CO_2 source and the Cardihaler to remove micro-ice crystals and particulates produced during gas expansion.

Breathing components include:

- PVC mask
- Silicone tubing

*These are replaceable items. In the research/operator context, masks and tubing are described as single-use for multi-participant use.

Environmental Conditions

- Store between **0–40°C**
- Keep the device away from direct sunlight or heat
- Use only in well-ventilated areas

CO_2 Cylinder Compatibility

The Cardihaler can be used with food-grade or beverage-grade CO_2 cylinders such as SodaStream, AGA, or Linde

Compatible Thread Types

- TR21x4 (regulator)
- CGA320 *(USA/Canada)*
- W21.8-14 *(Europe/Rest of World)*

Regulatory Requirements

Cylinders must follow the CO_2 safety standards of their respective regions, including:

- UN 1013
- DOT / OSHA / CGA (U.S.)
- ADR (EU)

WARRANTY & SUPPORT

Warranty and Returns

- The Cardihaler is covered by a one-year limited warranty.
- Return policies and procedures: For support with warranty claims or return-related questions, please contact Conscious Breathing.
- This warranty does not cover damage caused by liquid entering the device or exposure of the device to water or other fluids.

Support, Replacement Parts & Additional Resources

For replacement parts, ordering assistance, instructional materials, or general support, please contact Conscious Breathing through the official support channels:

- **Email:** cs@consciousbreathing.com
- **Website:** www.consciousbreathing.com

Instructional setup videos and additional resources are available from Conscious Breathing upon request.

LEGAL & REGULATORY NOTICES

This section provides an overview of the legal and regulatory obligations applicable to the Cardihaler. The device is designed in accordance with requirements related to CO_2 handling, USB-PD electrical safety, and general product safety and responsibility.

Device Classification

The Cardihaler is a consumer wellness product intended for breathing practice and controlled CO_2 exposure as part of general wellness, training, and lifestyle use.

The Cardihaler is not a medical device and is not intended to diagnose, treat, cure, or prevent any disease or medical condition. No medical claims are made regarding its use.

Regulatory status and requirements may vary by country or region. Users are responsible for ensuring compliance with applicable local laws and regulations.

CO_2 Handling Regulations

The Cardihaler uses external CO_2 cylinders (food- or beverage-grade) which are subject to the laws and handling requirements of the region in which they are purchased.

Users must follow all local CO_2 cylinder regulations.

- UN 1013 (international)
- DOT / OSHA / CGA (United States)
- ADR (European Union)
- Additional national requirements applicable in Asia and other regions

Each cylinder manufacturer is responsible for meeting the appropriate regulatory standards for their product. The Cardihaler does not modify or affect cylinder certification.

Electrical Safety

- The device is powered using low-voltage USB-C Power Delivery.
  - No mains voltage enters the device housing
  - Users must only use certified USB-C PD chargers of 30 W or greater
- The Cardihaler should not be used if the cable, power adapter, or device housing shows signs of damage.

Consumer Safety Responsibilities

Users are responsible for:

- Handling and storage of CO_2 cylinders
- Keeping the cylinder valve closed when the device is not in use
- Ensuring the device is not used by children
- Ensuring use in a well-ventilated room
- Inspecting tubing, mask, and regulator for wear or damage
- Not modifying the device or its components
- Not attempting internal repairs
- Ensuring the Cardihaler unit is not exposed to liquids or used in any configuration where water can travel through connected tubing toward the device

Improper cylinder handling or connection may result in leaks. If a leak is suspected, discontinue use immediately and ventilate the room.

Disclaimer

The manufacturer is not responsible for injury or damage resulting from:

- Misuse or modification of the device
- Use of non-compatible CO_2 cylinders
- Use outside the instructions provided
- Attempts to repair or alter internal components
- Use in unventilated spaces
- Using the Cardihaler with non-original accessories or unauthorized attachments

Users must follow all instructions in the manual for safe operation.

Intellectual Property

FINAL NOTES & APPENDICES

Component Overview (Images / diagrams)

Note: Photos in this appendix are for reference only. Exact packaging, layout, or included items may vary by region and order date.

Cardihaler components as packed in protective case.

Cardihaler Unit

Cardihaler wrench

CGA320 adapter (USA/Canada)

TR21x4 Regulator

W21.8-14 Adapter (Europe/Rest of World)

USB-C Power charger cord

Breathing Masks

Inlet and Outlet silicone tubing

Cardistone accessory includes a dedicated white silicone tubing (without quick-connect fitting) for regulator-based water use.

USB-C Power Delivery Charger with included adapter depending on region (USA/UK/EU/AU