CoZing®

LASER THERAPY HAMMER

Model: COZING-T05/T05-03/04/05/06/07/08/09



Thank you for your trust on our semiconductor laser therapy hammer

Please read the instruction carefully before using.Understand the indications and the use of methods. ensure use safely

The more info. , pls check the manual book contraindication part

【CAUTION】

Critical Precautions

1. Laser Safety Warnings

⚠ **CLASS IIIB/IV LASER PRODUCT** – Potential eye and skin hazard.

- **Never** direct the laser beam at eyes, reflective surfaces, or unintended targets (even brief exposure may cause permanent eye damage)
- Use protective eyewear rated for the laser' s wavelength if operational exposure is possible.
- Discontinue use immediately if skin irritation, dizziness, or abnormal sensations occur (may indicate accidental exposure).

2. Photosensitivity & Medication Warnings

⚠ **Risk of severe reactions** when combined with light-sensitive substances:

- **Avoid concurrent use** with photosensitizing medications (e.g., tetracyclines, retinoids, thiazides, sulfonamides). Consult a physician if uncertain.
- **Wait ⩾48 hours** after photodynamic therapy (PDT) or topical photosensitizer use (e.g., 5-ALA) before laser exposure.

3. Additional High-Risk Conditions

- Do not use on recently tanned skin, active infections, or areas with tattoos/permanent makeup (risk of burns or pigment changes).
- Pregnancy, epilepsy, or immunosuppression: Safety not established. Seek medical advice.

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【PRODUCT INTRODUCTION】

Parameter	Specification
Product Name	Laser Therapy Hammer
Manufacturer	Wuhan Cozing Medical Devices Co., Ltd.
Safety Class	Class 3R/Class IV
Therapeutic Method	Non-invasive transcutaneous photobiomodulation
Address	Building 8, Guannan Fuxing Medical Park, No. 58 Optical Valley Avenue, Wuhan

Therapeutic Wavelength Principles：

650nm (Red Light - 10mW per diode) Mechanism:

Absorbed by mitochondrial cytochrome c oxidase, enhancing ATP production and cellular repair.
Stimulates collagen synthesis (skin rejuvenation) and microcirculation (wound healing).

808nm / 810nm (Near-Infrared - 200mW to 500mW per diode) Mechanism:

Deeper penetration (3-5cm), targeting muscles, joints, and nerves.
Reduces inflammation (modulates COX-2/PGE2) and pain (endorphin release).
Accelerates tissue repair via fibroblast activation.

904nm (Pulsed Infrared - High Peak Power, Low Average Power ⩽3.87mW) Mechanism:

Pulsed mode penetrates 5-7cm, reaching deep joints/bones.
Triggers anti-inflammatory cytokines (IL-10) and neuroregeneration.
Safety: Short sessions (3-5min) due to high peak power but low thermal risk.

Multi-Wavelength Synergy

650nm + 808nm: Combines superficial healing (red) with deep pain relief (NIR).
904nm Pulsed + Continuous 810nm: Targets acute/chronic pain simultaneously.

Key Safety & Usage Notes

Pre-Treatment: Clean skin with non-alcoholic antiseptic to avoid light scattering.

Contact Angle: Maintain 90°±5° for optimal energy delivery.

Session Limits:

904nm Pulsed: ⩽5min/day (high peak power).

High-Power 808nm (500mW/diode): ⩽15min to prevent thermal buildup.

Low-Power 650nm (10mW/diode): Safe for extended use (20-30min).

(Refer to Table 1 for intensity levels and device-specific protocols.)

Design Tip:Use icons (e.g., mitochondria for 650nm, bone icon for 904nm) to visually reinforce mechanisms in the manual.

【INDICATIONS】

COZING-T05 Series Treatment Parameters Reference Table

Model	Session Duration	Daily Frequency	Treatment Course	Pain Indications	Other Indications
COZING-T05-03	15-20 min	1-2 times	2-4 weeks	• Frozen shoulder • Muscle strain	Postoperative wound healing
COZING-T05-04	10-15 min	1 time	3-5 weeks	• Lumbar disc pain • Knee arthritis	Chronic tendinitis
COZING-T05	20-30 min	2-3 times	4-8 weeks	• Carpal tunnel syndrome • Diabetic neuropathy	Chronic ulcers
COZING-T05-05	3-5 min	1 time	2-3 weeks	• Femoral head necrosis pain • Spinal nerve pain	Fracture recovery
COZING-T05-06	2-4 min	1 time	1-2 weeks	• CRPS • Phantom limb pain	Post-burn neuralgia
COZING-T05-07	5-8 min	1 time	2-4 weeks	• Rheumatoid arthralgia • Ankylosing spondylitis	Traumatic swelling
COZING-T05-08	5-10 min	1 time	3-6 weeks	• Achilles tendinitis • Sacroiliac joint pain	Post-surgical bone healing
COZING-T05-09	25-40 min	2 times	4-12 weeks	• Fibromyalgia • Migraine	Acne/Sleep disorders

Product Structure



Treatment Protocol Rationale

Acute Pain (COZING-T05-03/04)

Short course (2-5 weeks), high frequency (1-2x daily)

Chronic Pain (COZING-T05/09)

Extended course (4-12 weeks), low frequency (1x daily)

Super Pulsed Therapy (COZING-T05-05 to 08)

Brief sessions (⩽10 min), 48h intervals (avoid cumulative effects)

Usage Guidelines

Treatment Intervals:

Superficial (<3cm depth): ⩾6h between sessions

Deep tissue (⩾3cm): ⩾24h between sessions

Course Breaks: Pause 1 week after each completed course for reevaluation

【Contraindiqation】

General Contraindications (All Models)

Absolute Contraindications	Relative Contraindications	Special Notes
• Pregnancy (abdominal use) • Active cancer/tumors • Photosensitive disorders (lupus, porphyria) • Epilepsy/seizure disorders • Active HSV/skin infections • Photosensitizing medications (e.g., tetracyclines, isotretinoin) • Open bleeding wounds • Pacemaker/implantable device areas	• Autoimmune diseases (e.g., rheumatoid arthritis, SLE) • Thyroid dysfunction (critical for NIR models) • Steroid injections within 72 hours	• Metal implants/tattoos/dark skin (Fitzpatrick IV-VI): Reduce fluence, avoid thermal accumulation • Protocol compliance: Pre-treatment patch test and continuous patient monitoring required

Model-Specific Contraindications

1. COZING-T05-03/04/09 (Visible/NIR: 650nm + 810nm/808nm)

Absolute Contraindications	Relative Contraindications	Special Notes
• Retinal diseases (no ocular exposure) • Chemical peels within 2 weeks	• Keloid scarring history • Rosacea	• Laser safety goggles mandatory (650nm red light) • Avoid thyroid region: 810nm NIR may interfere with gland function

2. COZING-T05-05/06/07/08 (Super Pulsed: 904nm High-Power Pulsed)

Absolute Contraindications	Relative Contraindications	Special Notes
• Bone growth stimulators • Osteomyelitis (risk of bacterial dissemination) • Unhealed fractures	• Osteoporosis • Joint prosthesis areas	• Professional use only (certified operators) • Continuous probe motion: Prevent static thermal injury (peak power >20W/cm^2) • Deep tissue caution: Avoid bone penetration (904nm high tissue penetration)

3. COZING-T05-09 (Blue LED: 450nm)

Absolute Contraindications	Relative Contraindications	Special Notes
• Active retinoid therapy (phototoxicity risk) • Retinal disorders (blue light sensitivity)	• Melasma (may exacerbate) • Vitiligo (risk of uneven pigmentation)	• Avoid hyperpigmented areas (e.g., solar lentigines) • Treatment protocol: ⩽10 minutes /session, ⩾48-hour intervals

High-Risk Conditions (Require Medical Clearance)

The following conditions necessitate **prior physician approval:**

Bleeding disorders (INR >3.0 or platelets <50×10 /L)

Diabetic neuropathy/angiopathy(microcirculation impairment risk)

Seizure history (last 12 months): Neurologist consultation required

Cardiac pacemakers/implantables (contraindicated for high-power models T05-05/06/07/08)

Active autoimmune diseases (e.g., scleroderma flare-ups)

Power Density & Safety Thresholds:

Super Pulsed models (COZING-T05-05/06/07/08): Limit dwell time to <30 seconds per point when peak power density exceeds 5W/cm^2 to prevent dermal burns.

Blue LED (T05-09): Cumulative dose control (<60J/cm^2/session) due to 450nm oxidative stress induction.

Wavelength-Specific Risks:

810nm/808nm:Penetration depth 4-6cm; avoid prolonged exposure over endocrine-sensitive regions (thyroid, pineal gland).

904nm pulsed: Hemoglobin absorption prioritization; contraindicated in coagulopathies.

Pediatric Use:

Only COZING-T05-03/04 (low-power NIR) permitted under pediatric protocols; all other models prohibited for patients <18 years.

Regulatory & Safety Compliance

Class IIIB/IV Laser Certification: Super Pulsed models (COZING-T05-05 to 08) must comply with FDA 21 CFR 1040.10/EU IEC 60825.

Class IIIB/IV Laser Certification: High-power devices require ANSI Z136.3 or equivalent laser safety training.

Documentation: Record wavelength, dose, and patient response for all treatments; retain records ⩾5 years.

【SPECIFICATION】

1. General Parameters

Probe Geometry: Circular (Ø55mm)

Treatment Area: 23.76 cm^2 *(Calculated from $\pi \times (5.5/2)^2$)*

Operation Modes: Continuous/Pulse (1-9999Hz adjustable)

1.1 Model-Specific Specifications

COZING-T05 Series Technical Specifications

Model	Wavelength Combination	Total Power	Diode Configuration	Power Density (*5cm² Probe)
T05-3	650nm + 810nm	8W	15×650nm (5mW) 10×810nm (200mW)	87.33mW/cm² (650nm: 3.15W/cm² 810nm: 84mW/cm²)
T05-4	650nm + 810nm	10.4W	9×650nm (200mW) 16×810nm (500mW)	0.44W/cm² (650nm: 0.036W/cm² 810nm: 0.404W/cm²)
T05	650nm + 808nm	1.29W	19×650nm (10mW) 6×808nm (200mW)	0.054W/cm² (650nm: 0.038W/cm² 808nm: 0.016W/cm²)
T05-5	650nm + 904nm	550W* (Avg: 3.87mW)	3×650nm (10mW) 22×904nm SP (25W	23.15W/cm²*(Peak) (650nm: 0.006W/cm² 904nm Avg: 0.017W/cm²)
T05-6	650+808+904nm	280.5W* (Avg: 5.12W)	3×650nm (10mW) 11×808nm (500mW) 11×904nm SP (25W)	11.81W/cm²*(Peak) (Avg: 0.216W/cm²)
T05-7	Multi-spectral	130.1W* (Avg: 4.8W)	10×650nm (10mW) 5×808nm (500mW) 5×904nm SP (25W) 5×980nm (500mW)	5.38W/cm²*(Peak) (Avg: 0.198W/cm²)
T05-8	650+904nm	50.06W* (Avg: 3.2W)	6×650nm (10mW) 2×904nm SP (25W)	2.11W/cm²*(Peak) (Avg: 0.135W/cm²)
T05-9	650+808+450nm	3.45W	10×650nm (10mW) 6×808nm (500mW) 7×450nm LED (50mW)	0.145W/cm² (650nm: 0.02W/cm² 808nm: 0.12W/cm² 450nm: 0.005W/cm²)

Clinical Correlation:

Peak power densities >5W/cm² (T05-5 to T05-7) require movement during application to avoid localized heating

SP = Super Pulsed Laser (μs-level pulses with kW peak power)*

904nm average power is 3.87mW

5. Safety Features

Automatic Shutdown:

Temperature >42°C (probe surface)

Pulse overload (>110% rated power)

Beam Safety:

5-second delay on startup

Emergency stop button (mechanical cutoff)

7. Model Comparison Guide

Wavelength Penetration Depth:

450nm: 0.2-0.5mm (Superficial)
650nm: 2-8mm (Dermal)
808nm: 3-5cm (Muscle)
904nm SP: 5-10cm (Deep Tissue)

Typical Applications:

T05-3/T05-4: Musculoskeletal rehabilitation

T05-5/T05-6: Chronic pain management

T05-9: Dermatological conditions

ADDED BATTERY SPECS:

Lithium-ion battery: 18650 cell, 5200mAh capacity(only COZING-T05 has the battery inside, the other models no battery inside)

【OPERATION INSTRUCTION】

Power Management:

Long press (3s): System ON/OFF

Short press: Start/pause therapy

Parameter Adjustment Matrix:

Operation Guide:

Power On/Off: Hold the power button for 3 seconds. A beep will sound and the screen will light up.
Navigation: Press "OK" to move a yellow cursor through the menu options.
Frequency (F): With the cursor on F(Hz), short press +/- to change by 1 Hz; hold to change by 10 Hz。The max. F is 9999Hz. Recommended: 10Hz/40Hz.
Time: With the cursor on TIME, short press +/- to change by 5 seconds; hold to change by 5 minutes.
Wavelength (WL): With the cursor on WL, press +/- to cycle through the available wavelengths.
Power Intensity: With the cursor on POWER, press +/- to adjust through 10 intensity levels.
Laser Output: Short press the power button to start output. Adjusting settings pauses the laser. It resumes automatically after 6 seconds, or immediately with a short press of the power button.

SAFETY INTERLOCKS ADDED:

Automatic shutdown at >40°C casing temperature
Emergency stop: hold the power button for 3 seconds

【MAINTENANCE】

SCHEDULED SERVICE REQUIREMENTS:

Daily: Output window cleaning with soft cloths

COZING-T05 Battery

Maintenance & Safety(The other models without battery)

1.Always use the original charger to avoid overcharging.

2.For long-term storage, keep the battery charge between 40%-60% and store in a cool, dry place.

3.Do not disassemble the battery or expose it to extreme temperatures. Stop using immediately if swelling or leakage occurs.

REVISED PACKING LIST:

Item	Qty
Main Unit	1
Charger	1
Manual	1

【Warranty Card】

Thank you very much for using COZING–T05.

Purchase store	
Purchase date	Invoice number
Customer name	Customer phone
Problem Description :	
Factory Serial number :	

RoHS CE

PRODUCT: INSOMNIA TREATMENT APPARATUSModel:COZING-T05 series

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