

USER MANUAL

Industrial CO2 Laser Marking System

Model: SCM Industrial Series

Version: V1.0

1. Introduction

This manual provides instructions for installation, operation, and maintenance of the laser marking machine.

Please read this manual carefully before operating the machine.

2. Safety Instructions

2.1 General Safety

- Only trained personnel are allowed to operate the machine
- Do not open protective covers during operation
- Keep away from laser radiation area

2.2 Electrical Safety

- Ensure proper grounding
- Do not operate with damaged cables
- Disconnect power before maintenance

2.3 Laser Safety

- Avoid direct exposure to laser beam
- Wear protective glasses if required
- Do not modify laser system

3. Machine Overview

This machine is a high-speed galvo laser marking system designed for industrial production.

It provides stable performance, high precision, and supports continuous industrial production and can be integrated with automation systems..

It is widely used in textile, garment, paper, flexible packaging, and labeling industries.

4. Applications

Textile | Garment | Leather | Paper | Lighting | Flexible Packaging | Electronics

5. Installation Requirements

5.1 Power

Voltage: AC220V / 380V

Frequency: 50/60 Hz

The machine can be equipped with a transformer to match different local power supply requirements.

5.2 Air & Exhaust

Air Pressure: 0.5–0.7 MPa (For automatic systems)

Exhaust system required

5.3 Environment

Temperature: 5–30°C

Humidity: ≤70%

5.4 Space

The space required for equipment installation depends on the specific machine model.

6. Machine Structure

Main Components:

- Laser Source
- Galvo Scanner
- Control System
- Working Table
- Cooling System

7. Operation Guide

7.1 Startup

1. Turn on main power
2. Start control system
3. Check machine status

7.2 Processing

1. Load material
2. Import file
3. Adjust parameters
4. Start marking

7.3 Shutdown

1. Stop operation
2. Turn off system
3. Turn off main power

8. Software Operation



8.1 Interface Overview

The control software allows file import, parameter setting, and process control.

8.2 Basic Functions

- File Import
- Parameter Setting
- Position Adjustment
- Start/Stop Control

9. Maintenance

9.1 Daily

- Clean working area
- Check laser output

9.2 Weekly

- Clean lens
- Check motion system

9.3 Monthly

- Inspect electrical system
- Lubricate moving parts

10. Troubleshooting

Problem: No laser output

Cause: Power issue

Solution: Check power supply

Problem: Poor marking

Cause: Incorrect parameters

Solution: Adjust settings

11. Warranty & Service

Warranty: 12 months after delivery

We provide:

- Remote technical support
- Online training
- Lifetime service support

On-site service available upon request (extra cost)