

Cryogun Cryosurgical System (CO₂ / N₂O Compatible)

Instructions for Use

Cryosurgery Equipment

Intended use

Hand-held cryosurgical gun that delivers carbon dioxide (CO₂) or nitrous oxide (N₂O) gas to a probe tip to freeze targeted tissue during outpatient cryotherapy in dermatology, gynecology, ENT and general surgery.

Intended users

For use by trained healthcare professionals. Follow your facility's protocols and applicable regulations.

Read this manual completely before first use and keep it with the product. This document provides general operating, care and safety guidance. Where the product is supplied with manufacturer labeling or instructions, those take precedence. For questions, a replacement copy, or a digital copy of this manual, email sales@scimedstore.com.

1. Safety

Safety warnings and cautions

- For use by trained healthcare professionals only. Follow your facility's protocols and applicable regulations.
- Freeze duration, number of freeze-thaw cycles and treatment margins must be set according to clinical protocol and the physician's judgment.
- The probe tip reaches extremely low temperatures. Avoid contact with healthy tissue and the operator's skin.
- Handle high-pressure gas cylinders according to compressed medical gas safety rules: secure cylinders upright and keep away from heat.
- Use in a well-ventilated area and vent exhaust gas away from the patient's and operator's face.
- Check all connections and seals for leaks before each use. Do not use if a leak is detected.
- Close the cylinder valve and release residual pressure before changing probes or disconnecting the unit.
- Wear appropriate personal protective equipment, including gloves and eye protection.

2. Package contents

- Cryogun body (probes sold separately)

Check contents on receipt. Report missing or damaged items to sales@scimedstore.com within 48 hours of delivery.

3. Specifications

Variants	Varies by variant: B-101 Non-Silencer; B-102 Silencer; Super Deluxe Silencer with ON/OFF switch
Cryogenic gas	CO2 or N2O
Probe tip temperature	Approximately -79 °C (CO2) or -89 °C (N2O)
Body material	ABS plastic
Operation	Hand-held, trigger-operated; ON/OFF switch on Super Deluxe variant
Probes	Sold separately; listing states probes are autoclavable

4. Unpacking and setup

- 1 Unpack and inspect the gun body for damage.
- 2 Ensure the cylinder valve is closed and the CO2 or N2O cylinder is secured upright.
- 3 Attach the gas connector to the cylinder with its washer in place and tighten firmly.
- 4 Connect the cryogun to the gas line.
- 5 Thread the selected probe onto the gun until secure.
- 6 Open the cylinder valve slowly and check joints for leaks (listen for hissing). Close the valve and correct any leak before use.
- 7 Briefly operate the trigger away from the patient to confirm gas flow and probe cooling.

5. Operation

Performing a cryotherapy application

- 1 Prepare the patient and treatment site according to clinical protocol.
- 2 Open the cylinder valve slowly. On the Super Deluxe variant, set the ON/OFF switch to ON.
- 3 Position the probe on the target tissue under direct visualization.
- 4 Press the trigger to release gas to the probe tip and begin freezing.
- 5 Monitor ice formation; freeze time and margins are set according to clinical protocol and the physician's judgment.
- 6 Release the trigger (or switch OFF) and allow the tissue to thaw before withdrawing the probe. Do not pull a frozen probe away from tissue.
- 7 Repeat freeze-thaw cycles only as directed by clinical protocol.

Changing probes and shutting down

- 1 Close the cylinder valve.
- 2 Press the trigger away from the patient to release residual pressure.
- 3 Allow the probe to warm to room temperature.
- 4 Unscrew the probe; fit a new probe if continuing, then reopen the valve and check for leaks.
- 5 At the end of the session, disconnect the gun from the cylinder and store it in a clean, dry place.

6. Cleaning and disinfection

- Allow the probe to warm to room temperature before handling.
- Remove probes after each patient and clean off visible soil with mild detergent.
- Probes may be autoclaved per the listing; follow your facility's reprocessing protocol.
- Wipe the gun body with a disinfectant compatible with ABS plastic. Do not autoclave the gun body.
- Do not immerse the gun body or let liquid enter the gas pathway.
- Dry all parts thoroughly before storage.

7. Maintenance and storage

- Inspect washers and gas seals at each use and replace if worn.
- Check probe threads and tips for damage before use.
- Store the gun and probes clean and dry.
- Store gas cylinders separately according to compressed gas regulations.
- Refer repairs to qualified service personnel. Do not disassemble the gun body.

8. Troubleshooting

Problem	Likely cause	What to do
No gas flow when trigger is pressed	Cylinder valve closed, cylinder empty, or ON/OFF switch off (Super Deluxe)	Open the valve, check cylinder contents and switch position.
Hissing at connections	Missing or worn washer, or loose connection	Close the valve, release pressure, replace the washer and retighten.
Probe does not freeze adequately	Low cylinder pressure or probe not seated	Check cylinder contents and ensure the probe is fully threaded.
Probe sticks to tissue	Withdrawal before thaw	Stop gas flow and wait for complete thaw before removing the probe.
Frost on gun body or hose	Gas leak	Stop use, close the valve and inspect connections.
Operation louder than expected	Non-silencer variant or damaged silencer	Expected on B-101; for silencer variants, contact service.

9. Disposal

- Return empty gas cylinders to the gas supplier; do not dispose of pressurized cylinders in waste.
- Decontaminate the gun and probes before disposal.
- Dispose of in accordance with local regulations for medical equipment.

10. Warranty and support

Products are covered by SciMed's standard warranty (12 months from purchase unless a different period is stated on your invoice). Warranty terms: scimedstore.com/pages/warranty.

Support, spare parts and additional copies of this manual: sales@scimedstore.com. Please include your order number and a photo of the product or issue.

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