

Cryo.s™ 8-Channel Handheld Decapper

Instructions For Use

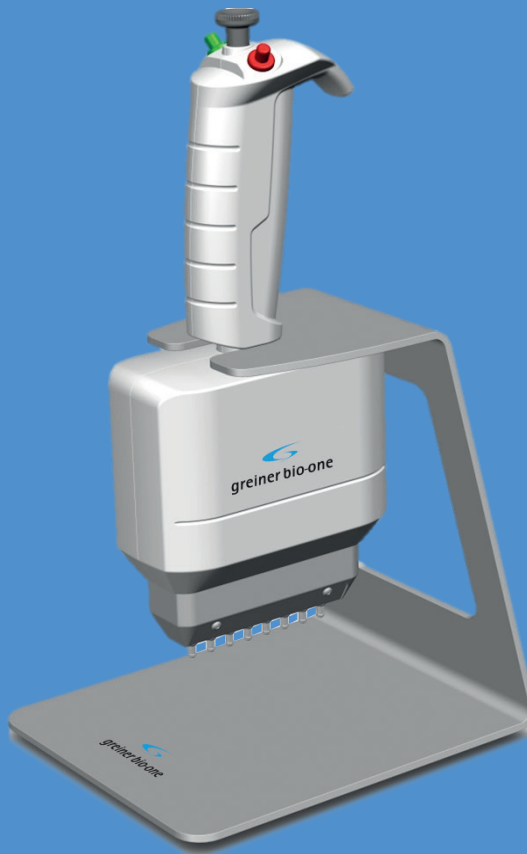


TABLE OF CONTENT

1. CONGRATULATIONS!	4
2. BEFORE YOU BEGIN	4
3. HAZARDS AND PRECAUTIONS	4
4. OPERATING CONDITIONS	4
5. INTENDED USE	5
6. PARTS	6
7. OPERATION	7
7.1 Opening of Tubes	7
7.2 Parking Screw Caps	7
7.3 Closing Tubes	7
7.4 Wireless Operation	7
8. MAINTENANCE, SERVICE AND WARRANTY	9
8.1 Cleaning of the Decapper	9
8.2 Maintenance and Repair	9
8.3 Warranty	9
9. DECLARATION OF CONFORMITY	10
10. COMPLIANCE WITH THE EUROPEAN UNION'S WASTE ELECTRICAL & ELECTRONIC EQUIPMENT	11

COPYRIGHT INFORMATION

©Copyright 2016 by Greiner Bio-One

Greiner Bio-One GmbH

Maybachstr. 2, 72636 Frickenhausen, Germany

Phone: +49 (0) 7022 948-0, Fax: +49 (0) 7022 948-514

info@de.gbo.com, www.gbo.com

1. CONGRATULATIONS!

With your purchase of the Cryo.s™ 8-Channel Handheld Decapper you acquired a state-of-the-art precision instrument for the electronic opening and closing of micro-tubes. In contrast to comparable products, the Cryo.s™ 8-Channel Handheld Decapper utilizes eight electric motors which drive individual spindles allowing for a highly precise processing of eight tubes in parallel. At the core of the device, an innovative microchip controls the movement of each spindle and the precise application of pre-defined torque values for an appropriate tube closure. Using the device, there is no risks of overtightening screw caps or screwing them too loosely onto tubes. An integrated re-chargeable battery provides the convenience of wireless operation of the device. The Cryo.s™ 8-Channel Handheld Decapper is ergonomically designed and functions intuitively. You may need only a quick survey of this manual to use it.

2. BEFORE YOU BEGIN

Before using the Cryo.s™ 8-Channel Handheld Decapper, read these Instructions For Use and verify the contents of the package.

The package should contain the following items:

- 1 Handheld Decapper
- 1 Operator's Manual including Certificate of Warranty
- 1 Power Supply with International Adaptor Set
- 1 Benchtop Stand

If items are missing, contact your Greiner Bio-One representative.

Before first-time use, charge the Decapper by connecting it to the power supply¹ which itself is connected to a standard 100 – 240 V, 50 – 60 Hz wall socket. Allow the device to charge for 2 h in order to achieve full battery charge.

3. HAZARDS AND PRECAUTIONS

There are no hazards known associated with the Cryo.s™ 8-Channel Handheld Decapper when used in accordance with these instructions for use.

Do not use harsh solvents or chemicals for cleaning or disinfection of the decapper. Strictly avoid excessive amounts of liquid on the decapper. Liquid may penetrate into the interior of the device and cause damage of electronic parts as well as short circuit.

Do not autoclave the decapper. Do not open, modify or drop the device.

4. OPERATING CONDITIONS AND TECHNICAL DATA

Operating Conditions and Technical Data	
Operating Temperature:	15 °C to 30 °C
Relative Humidity:	10 to 95 %, not condensing
Power Supply Input:	100 to 240 V AC ~ 50 / 60 Hz 0.35 A
Power Supply Output:	8.4 V DC 1.3 A
Rotating Speed of Bits:	100 - 200 rotations per minute
Preset Torque Value	70 mNm +/- 10 mNm

¹ Use only power adaptor supplied with the device by Greiner Bio-One. Contact your Greiner Bio-One representative for replacement power supply.

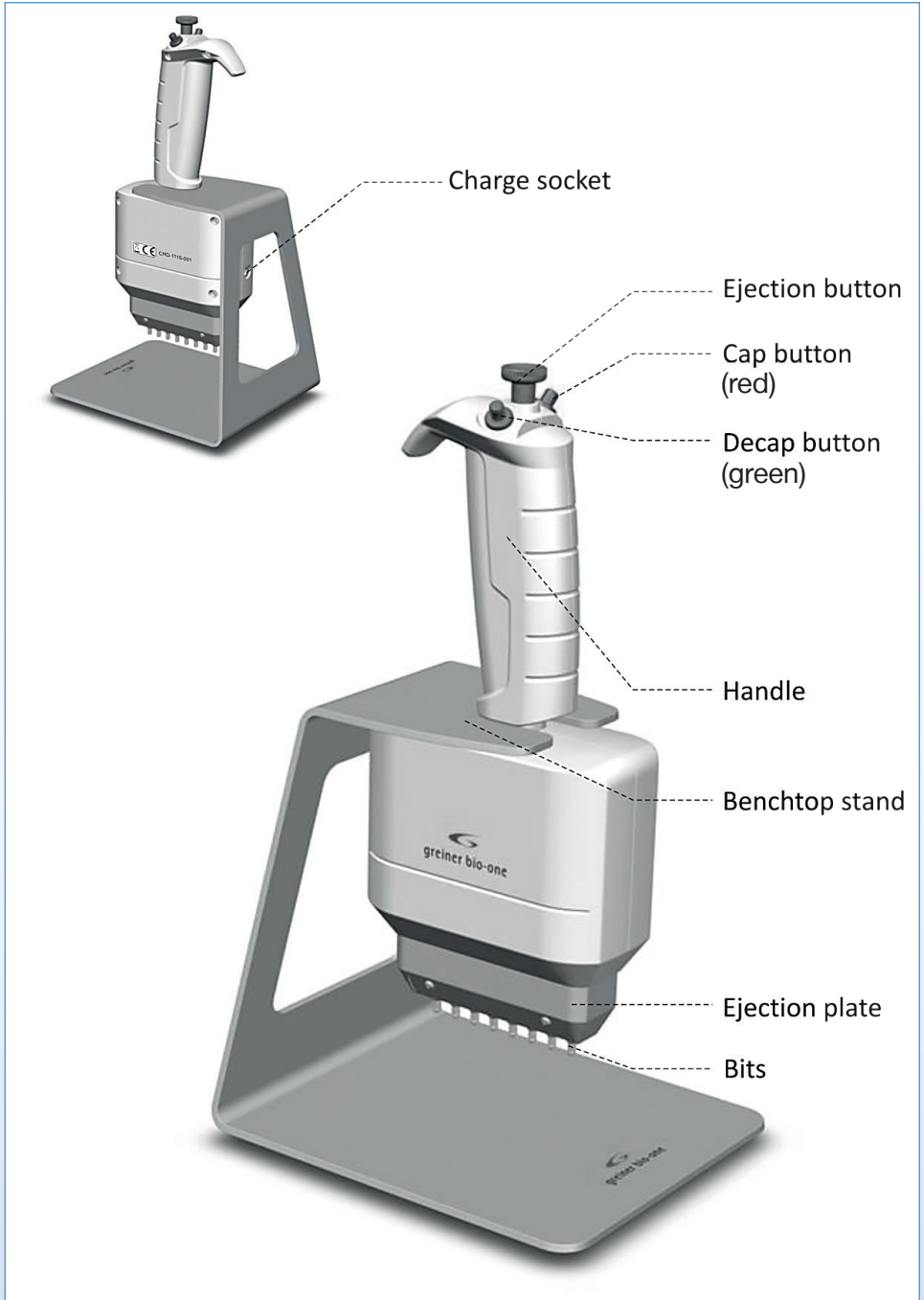
5. INTENDED USE

The Cryo.s™ 8-Channel Handheld Decapper is an electronic device assisting in the opening and closing of Cryo.s™ Biobanking Tubes in 96-way racks. A list of compatible products from Greiner Bio-One GmbH is provided hereinafter.

REF	Product description
131202	Capped 300 µL Cryo.s™ Biobanking Tubes, bulk packed, nonsterile
132202	Capped 600 µL Cryo.s™ Biobanking Tubes, bulk packed, nonsterile
133202	Capped 1000 µL Cryo.s™ Biobanking Tubes, bulk packed, nonsterile
131263	Capped 300 µL Cryo.s™ Biobanking Tubes, bulk packed, sterile
132263	Capped 600 µL Cryo.s™ Biobanking Tubes, bulk packed, sterile
133263	Capped 1000 µL Cryo.s™ Biobanking Tubes, bulk packed, sterile
385270	96-well plate with 96 screw caps (1/well), sterile
976570	Rack with 96 uncapped 300 µL Cryo.s™ Biobanking Tubes, nonsterile
977570	Rack with 96 uncapped 600 µL Cryo.s™ Biobanking Tubes, nonsterile
978570	Rack with 96 uncapped 1000 µL Cryo.s™ Biobanking Tubes, nonsterile
976580	Rack with 96 capped 300 µL Cryo.s™ Biobanking Tubes, sterile
977580	Rack with 96 capped 600 µL Cryo.s™ Biobanking Tubes, sterile
978580	Rack with 96 capped 1000 µL Cryo.s™ Biobanking Tubes, sterile
976561	Rack with 96 capped 300 µL Cryo.s™ Biobanking Tubes, sterile
977561	Rack with 96 capped 600 µL Cryo.s™ Biobanking Tubes, sterile
978561	Rack with 96 capped 1000 µL Cryo.s™ Biobanking Tubes, sterile
976501	Rack for 300 µL Cryo.s™ Biobanking Tubes, no tubes included
977501	Rack for 600 µL Cryo.s™ Biobanking Tubes, no tubes included
978501	Rack for 1000 µL Cryo.s™ Biobanking Tubes, no tubes included

In addition, the decapper may be used with Biobanking tubes with coloured versions of the screw cap (REF 97x5xx).

6. PARTS



7. OPERATION

7.1 Opening of Tubes

- For the opening of tubes, tubes must be presented in the corresponding tube rack.
- Fully insert the eight metal bits of the Decapper into the inner cavities of eight corresponding screw caps by pressing the Decapper down. The ejection plate should be parallel with the tubes and the bits fully inserted.



- Briefly press the Decap button (green) to initiate tube opening. While decapping, move the Decapper upwards (away from tubes).

7.2 Parking Screw Caps

- Screw caps may stay mounted onto the bits of the Decapper during all steps of pipetting into and from the open tubes. At this stage the Decapper may be set aside and stored in the Benchtop stand.
- Alternatively screw caps may be ejected into the wells of a sterile u-bottom 96-well plate (REF 650161). Thus, multiple rows of tubes may be opened and later on re-closed after pipetting steps have been completed.


7.3 Closing of Tubes

- In case screw caps were stored in a 96-well plate, use the Decapper to pick the screw caps up from the plate. Position the Decapper with the attached screw caps directly above the tube openings thereby establishing direct contact between screw caps and tubes.
- Gently press the Decapper down against tubes and activate the Cap button (red) to initiate the capping process. While capping, press the Decapper downwards onto the tubes until rotation of all spindles has come to a complete stop.
- Release screw caps by pressing the Ejection button.

7.4 Wireless Operation

- Use the Decapper in wireless mode by removing the charger cable.
- Alarm tones will sound if the battery is low. In this case attach the charger cable to the Decapper.
- The battery may be charged during operation of the device.

Alarm tones	Battery status
Two short alarm tones after activation of Decap or Cap button	Low battery with 20 % electric charge left. Device is still operable. Battery should be re-charged.
Series of three short alarm tones after activation of Decap or Cap button	Battery charge is below process stability. Device stops. Battery must be re-charged.



Only use the battery charger which was originally supplied with the Decapper! In case of loss or defect, contact your Greiner Bio-One representative for a replacement.
In case of excessive development of heat, detach the charger cable. If this problem re-occurs contact your Greiner Bio-One representative.

During longer periods of disuse, re-charge the Decapper battery from time to time to maintain a state of battery charge of about 50-70 %. This will prolong the overall lifespan of the battery. In addition, do not store the decapper at temperatures below 15 °C.

The battery charger has an LED indicating the status of battery charge.

LED colour	Status
Orange	Battery charging, not fully charged.
Green	Battery fully charged. Remove charger cable.
Not illuminated	Not charging, charger cable not attached.

8. MAINTENANCE, SERVICE AND WARRANTY

8.1 Cleaning of the Decapper

The device can be cleaned using a cloth dampened with water, mild cleaning solution, commercially available RNase and DNA decontamination solutions or 70 % ethanol in water. See also Chapter 3 for Safety Precautions.



Do not immerse the Decapper in cleaning solution.

8.2 Maintenance and Repair

Greiner Bio-One offers a maintenance package for your Decapper. Contact your local Greiner Bio-One representative for more details on this maintenance package.

In case your decapper becomes non-functional beyond Warranty terms, contact your local Greiner Bio-One representative for details on the repair service.

8.3 Warranty

Greiner Bio-One warrants the Decapper free from defects for a period of 24 months after purchase. A Warranty Certificate is part of this manual. Within warranty terms Greiner Bio-One will repair your decapper free of charge or replace your non-functional unit with a new one. Please get in touch with your Greiner Bio-One representative if you want to apply for cost-free repair within warranty-terms.



greiner bio-one

Warranty Certificate

All Greiner Bio-One Cryo.s™ 8-Channel Handheld Decappers are warranted fully functional and free from material defects for a period of two years from the date of purchase on¹. Greiner Bio-One will repair or replace the defective product upon notification and in accordance with the following conditions.

- The product becomes non-functional within the period of product warranty starting with the date of delivery.
- Greiner Bio-One reserves the right to refuse cost-free repair or replacement of non-functional devices in case the product was used outside of the intended use specified in this manual².
- The device identification number specified hereinafter must be identical with the number printed onto the backside of the device which You send in for cost-free repair.

This certificate is valid in combination with the Greiner Bio-One Cryo.s™ 8-Channel Handheld Decapper with the following identification number.

¹ The rechargeable battery is not included in the 2-year warranty. Apply the good practice described under 7.4 to maximise the lifespan of the re-chargeable battery. Greiner Bio-One offers a fee-based battery exchange service. Please contact your local Greiner Bio-One representative for details on this service.

² Misuse includes any use other than the intended use specified in this manual as well as use under conditions other than specified above. Devices must not be dropped, opened, modified, used at temperatures outside the operational temperature range, put in contact with excessive amounts of liquid or used with labware other than specified above.

9. DECLARATION OF CONFORMITY

		EG-KONFORMITÄTSERKLÄRUNG	Page 1 of 1
Drawn Date Revision	S. Kälberer 28.01.2016 01	EC DECLARATION OF CONFORMITY	

Greiner Bio-One GmbH
Maybachstr. 2
D-72636 Frickenhausen
Germany

erklärt hiermit, dass das bezeichnete Gerät(e) den einschlägigen grundlegenden Anforderungen der aufgeführten EG-Richtlinien und Normen entspricht. Bei einer nicht mit uns abgestimmten Änderung des Produktes oder einer nicht bestimmungsgemäßen Anwendung verliert diese Erklärung ihre Gültigkeit.

hereby declares that the device(s) named below fulfills the relevant fundamental requirements of the EC directives and standards listed. In the case of unauthorized modifications to the device or an unintended use this declaration becomes invalid.

Produktbezeichnung / Product Description:

Cryo.s™8-Channel Handheld Decapper

Artikelnummer / Part No.:

852070

Einschlägige EG-Richtlinien / Relevant EC Directives:

Maschinenrichtlinie (2006/42/EG, Anhang II A/ Machinery Directive (2006/42/EC, Anhang II A)
Elektromagnetische Verträglichkeit (2014/30/EU/ Electromagnetic Compatibility Directive (2014/30/EU)
RoHS (2011/65/EU)
Batterien und Akkumulatoren (2006/66/EG)/ Battery Directive (2006/66/EC)
Elektro- u. Elektronik-Altgeräte (2002/96/EG)/ Waste electrical and electronic equipment (2002/96/EC)

Normen / Harmonized Standards:

EN ISO 12100-1 & EN ISO 12100-2: Sicherheit von Maschinen, Grundbegriffe, Allgemeine Gestaltungsleitsätze/ Safety of machinery-basic concept, general principles for design
EN ISO 60204-1: Elektrische Ausrüstung von Industriemaschinen/ Electrical equipment of machines
Transport Akku/ UN Transport Test (UN 38.3)

Datum / Date: 7.4.2016



Dr. A. Ganser, Local QM-Representative

10. COMPLIANCE WITH THE EUROPEAN UNION'S WASTE ELECTRICAL & ELECTRONIC EQUIPMENT

This product is required to comply with the European Union's Waste Electrical & Electronic Equipment (WEEE) Directive 2002/96/EC. It is marked with the following symbol:



If you are a user located within Europe you have the possibility of returning WEEE free of charge. Please contact your local Greiner Bio-One representative for details on the disposal process.



Products that are considered as a biological hazard or have been medically contaminated are not to be recycled through this program, but must be treated as bio-hazard waste and disposed of in accordance with your local regulations.

Greiner Bio-One Contact Information

Germany

Greiner Bio-One GmbH
Phone +49 7022 948-0
Fax +49 7022 948-514
E-Mail info@de.gbo.com

Austria

Greiner Bio-One GmbH
Phone +43 7583 6791-0
Fax +43 7583 6318
E-Mail office@at.gbo.com

Belgium

Greiner Bio-One BVBA/ SPRL
Phone +32 2461 0910
Fax +32 2461 0905
E-Mail info@be.gbo.com

Brazil

Greiner Bio-One Brasil
Phone +55 19 3468-9600
Fax +55 19 3468-9621
E-Mail office@br.gbo.com

China

Greiner Bio-One Suns Co., Ltd.
Phone +86 10 83 55 19 91
Fax +86 10 63 56 69 00
E-Mail office@cn.gbo.com

France

Greiner Bio-One SAS
Phone +33 1 69 86 25 25
Fax +33 1 69 86 25 35
E-Mail infos@fr.gbo.com

Hungary

Greiner Bio-One Hungary Kft.
Phone +36 96 213 088
Fax +36 96 213 198
E-Mail office@hu.gbo.com

Japan

Greiner Bio-One Co. Ltd.
Phone +81 3350 58875
Fax +81 3505 8974
E-Mail info@jp.gbo.com

Netherlands

Greiner Bio-One B.V.
Phone +31 172 4209 00
Fax +31 172 4438 01
E-Mail info@nl.gbo.com

United Kingdom

Greiner Bio-One Ltd.
Phone +44 1453 8252 55
Fax +44 1453 8262 66
E-Mail info@uk.gbo.com

USA

Greiner Bio-One North America Inc.
Phone +1 704 261-7800
Fax +1 704 261-7899
E-Mail info@us.gbo.com