

INTEGRAMOUSE®

INSTRUCTIONS FOR USE

Version "USB 1.1", 2003-10-01, Type: IM USB, V1 / 2003



DEAR CUSTOMER!

Thank you for choosing the INTEGRAMOUSE® as a high-quality input device for your computer. This manual contains useful and important information. Please read it carefully before using the INTEGRAMOUSE® for the first time. Your authorised INTEGRAMOUSE® specialist dealer will be happy to answer any questions you may have. We hope you enjoy your INTEGRAMOUSE®.

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1. SAFETY INSTRUCTIONS FOR USING THE INTEGRAMOUSE®

- The INTEGRAMOUSE® is intended for temporary use only (the mouthpiece must not remain in the mouth continuously for more than 60 minutes).
- People with epilepsy or those who make uncontrolled head movements must not use the INTEGRAMOUSE®.
- The INTEGRAMOUSE® may only be used with a correctly fitted membrane that has been checked for leaks.¹
- The INTEGRAMOUSE® must not be installed, directly or indirectly, on electrically or mechanically powered vehicles (in particular wheelchairs).
- The INTEGRAMOUSE® in combination with the attached original silicone attachment may only be used by persons who are not at risk of swallowing such objects.
- As standard, the INTEGRAMOUSE® is supplied with a latex membrane. Latex-free membranes are available from INTEGRAMOUSE® specialist dealers² for people with a latex allergy. The mouthpiece is latex-free.
- The INTEGRAMOUSE® must not be used in conjunction with Class IIa or higher medical devices (for example, life-sustaining equipment).

The manufacturer is responsible for the safety, reliability, and performance of the INTEGRAMOUSE® only if:

- assembly and commissioning have been carried out in accordance with the instructions in this manual,
- no product modifications or repairs (other than by the manufacturer) have been carried out,
- the cleaning instructions for the mouthpiece in these instructions for use have been followed,
- the membrane is changed at the recommended intervals,
- the device is used with original accessories,
- the device is not used if one or more parts are damaged,
- the device has been mounted on a stand recommended by an authorised LifeTool specialist dealer.

2. SCOPE OF DELIVERY

Please check the delivery for completeness.

The following items were supplied to you:

1. 1 INTEGRAMOUSE® with mouthpiece, distributor box (1a) and USB cable (1b)
2. 1 spare mouthpiece
3. 50 replacement membranes
4. 1 silicone attachment
5. 2 spare sealing rings
6. 1 manual
7. (optional) 1 ready-to-use MagicArm® stand with camera rail

¹See also the chapter “How to change the mouthpiece membrane” on page 8.

²You can find an up-to-date list of all LifeTool specialist dealers online at <http://www.integramouse.com>.

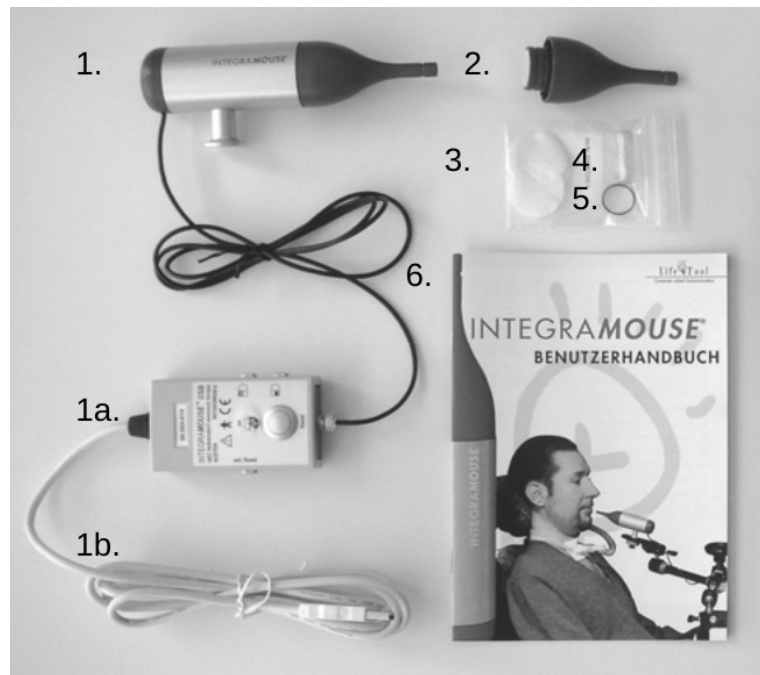


Illustration 1a: Scope of delivery INTEGRAMOUSE® (items 1–6)



Illustration 1b: Optional MagicArm® stand (item 7)

3. BRIEF DESCRIPTION OF THE INTEGRAMOUSE®

The INTEGRAMOUSE® is a full-fledged computer mouse operated with the mouth. The mouse cursor is moved across the screen by the slightest movements of the mouthpiece (>15 grams of lateral force on the mouthpiece). As with an ordinary computer mouse, it can be moved and repositioned continuously and dynamically across the entire screen, from very slow to very fast.

The mouse buttons are operated by sipping and puffing. In the standard setting, a short sip at the mouthpiece opening triggers the left mouse button, and a short puff into the mouthpiece opening triggers the right mouse button.

Two short sips produce a double-click. A short sip followed by holding the air in the mouthpiece allows objects to be dragged across the screen (drag and drop).

Once connected to your computer, the INTEGRAMOUSE® is automatically recognised and installed as the default mouse (plug and play).

4. QUICK START GUIDE FOR COMMISSIONING THE INTEGRAMOUSE®

- Install the supplied stand, or the one recommended by your LifeTool specialist dealer, at the desired workstation.³
- Mount the INTEGRAMOUSE® on the stand by screwing the mounting screw⁴ as far as possible into the housing base (Illustration 2) and securing it with the lock nut; then bring the device into a horizontal working position that is comfortable for the user.



Illustration 2: Mounting the INTEGRAMOUSE® on the stand (housing base / lock nut / mounting screw)

- Connect the USB connector to a USB port on your computer.

Do not touch the reset button or the mouthpiece while doing so!

- Your computer's operating system automatically detects and installs the INTEGRAMOUSE® as the default mouse.⁵
- The INTEGRAMOUSE® is ready for use when the operating indicator on the distributor box lights up green.
- Before using the INTEGRAMOUSE®, please clean the mouthpiece.⁶

³For instructions on mounting your stand, see the enclosed "Quick guide for mounting the stand at your workstation".

⁴Screw and counter-screw with 1/4" Whitworth right-hand thread (stand/tripod or photographic thread).

⁵See also Chapter 9, "Frequently Asked Questions and Answers", page 9 ff.

⁶See also Chapter 7, "How to clean the mouthpiece", page 7.

5. COMPONENTS OF THE INTEGRAMOUSE®

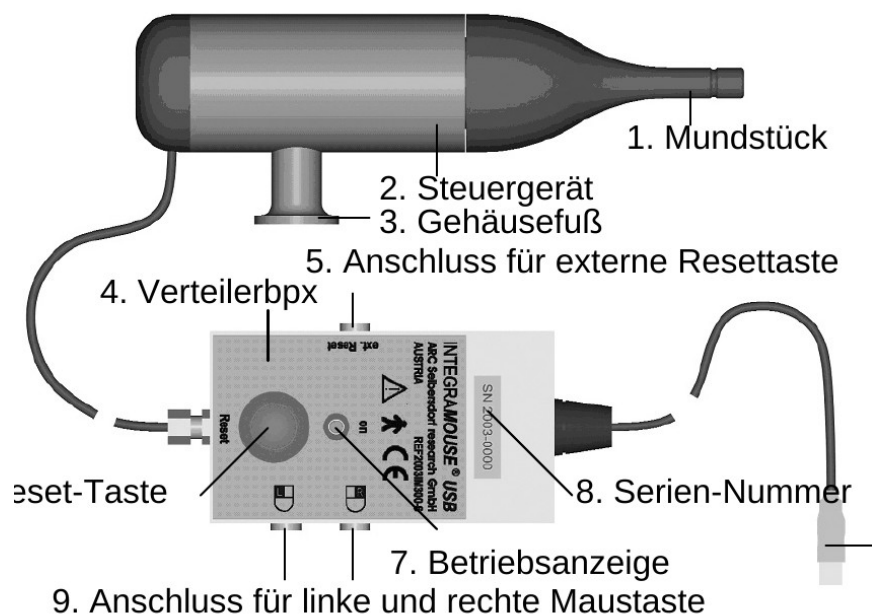


Illustration 3: Components of the INTEGRAMOUSE® (diagram labels are in German; see the English list below — numbers correspond)

Functions and components of the INTEGRAMOUSE®:

1. Removable, movable mouthpiece⁷ with membrane and clamping ring – used to control the mouse cursor and mouse buttons
2. Control unit
3. Housing base for attachment to the stand
4. Distributor box
5. Connector for an external reset button, with jack socket
6. Reset button – for resetting (calibrating) the INTEGRAMOUSE®
7. Operating indicator – lights up green during normal operation
8. Serial number
9. Connection options for external left and right mouse buttons
10. USB connector for connecting to your computer

⁷Biocompatible material, latex-free.

6. HOW TO WORK WITH THE INTEGRAMOUSE®

You can work with the INTEGRAMOUSE® both lying down and sitting.

The INTEGRAMOUSE® must not be mounted on wheelchairs!

To avoid collisions with the INTEGRAMOUSE®, make sure that:

- the user first adopts a comfortable working position in front of the screen
- and only then is the INTEGRAMOUSE® brought into a fatigue-free working position in front of the user's mouth!

For faultless operation, an approximately horizontal working position of the INTEGRAMOUSE® is necessary. It may be mounted tilting slightly backwards or forwards (Illustration 4).

A working position of the INTEGRAMOUSE® that is tilted sideways can cause errors in processing mouse movements (Illustration 5)!



Illustration 4: CORRECT — horizontal positioning



Illustration 5: INCORRECT — tilted positioning

How to control the mouse cursor with the INTEGRAMOUSE®

- To control the mouse cursor, take the mouthpiece between your lips and press it with lip movements in the direction in which you want the mouse cursor to move across the screen.
- Only put the mouthpiece as far into your mouth as until your teeth reach the groove on the mouthpiece.
- If you prefer a soft surface on the mouthpiece, slide the enclosed original silicone attachment over the mouthpiece opening until it is flush and sits firmly.

The silicone attachment may only be used by persons who are not at risk of swallowing such objects!

How to operate the mouse buttons with the INTEGRAMOUSE®

- As a standard setting, the left mouse button is operated by a short sip and the right mouse button by a short puff. You can adjust this standard setting to your personal needs in the “Mouse Properties” menu of your operating system's control panel.
- The speed of the mouse cursor and the double-click speed can also be individually adjusted in the “Mouse Properties” menu of your operating system.
- If you are (temporarily) unable to operate the mouse buttons by sipping and/or puffing, external buttons or sensors can be connected to the distributor box instead.⁸
- If the mouse cursor starts to move across the screen on its own (“drifting”), briefly press the reset button on the distributor box⁹, without touching the mouthpiece. This recalibrates the INTEGRAMOUSE® and stabilises the mouse cursor again.
- You can also attach an external button or sensor to the distributor box¹⁰, so that you, as the user, can press the reset button independently and without outside help.

After pressing the reset button, the mouthpiece must not be moved for approximately five seconds!

⁸See also Chapter 5, Components of the INTEGRAMOUSE®, page 5.

⁹See also Chapter 5, Components of the INTEGRAMOUSE®, page 5.

¹⁰See also Chapter 5, Components of the INTEGRAMOUSE®, page 5.

7. HYGIENE REQUIREMENTS WHEN USING THE MOUTHPIECE

A patented mouthpiece was developed for hygienic use of the INTEGRAMOUSE®. Please clean/disinfect the mouthpiece¹¹ before first use and every time the user changes. With regular use of the INTEGRAMOUSE®, we recommend cleaning the mouthpiece weekly and changing the membrane.

How to clean the mouthpiece

Hold the control unit firmly and pull the mouthpiece off the housing with a slight turning motion, using your thumb and index finger (Illustration 6). When refitting the mouthpiece, make sure that you push it on as far as it will go and that a small gap remains visible between the mouthpiece and the housing (Illustration 7).



Illustration 6: Removing the mouthpiece

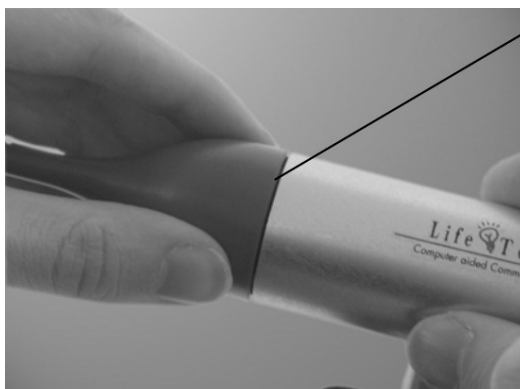


Illustration 7: Attaching the mouthpiece (note the gap)

- 1) We recommend removing the membrane before each cleaning process.
- 2) This is best done using boiling water (100 °C). The mouthpiece should be completely covered in boiling water for two to three minutes.¹²
- 3) For external disinfection (mouthpiece, clamping ring, distributor box, housing), we recommend using commercially available agents suitable for plastics¹³ (e.g. the products “Mikrozyd AF Liquid” or “Gigasept” from Schülke & Mayr).

¹¹If the silicone attachment is used, it must be cleaned together with the mouthpiece.

¹²Please note that boiling the mouthpiece too frequently can shorten its service life (for more information, contact your LifeTool specialist dealer).

¹³e.g. Gigasept, or [product name omitted in source] from Schülke & Mayr, or “Sekusept forte” from Henkel. [Translator's note: the source text reads “z.B. Gigasept oder von Schülke & Mayr...”,

The mouthpiece must not be heated above 100 °C and is not intended for any form of sterilisation (e.g. instrument disinfection)!

The control unit and the distributor box may only be cleaned on the outside (dry)!

No liquid must enter the gap between the mouthpiece and the control unit!

- Before reusing the cleaned mouthpiece, make sure it is completely dry and has cooled to room temperature.
- Disinfecting the mouthpiece with commercially available agents suitable for plastics¹⁴ is possible. Be sure to follow the respective manufacturer's instructions. The membrane must be removed before this cleaning.
- After cleaning and drying, put the mouthpiece back onto the opening on the control unit (Illustration 7).
- The mouthpiece is correctly fitted when a small gap (0.3 to 0.4 mm) remains between the control unit and the mouthpiece (Illustration 7).

How to change the mouthpiece membrane

With regular use, please change the membrane once a week, and always when the membrane has become leaky or porous, no longer has a taut, smooth surface, or when its light colour has changed.

Only original membranes may be used to ensure full functionality of the sip/puff sensor!¹⁵

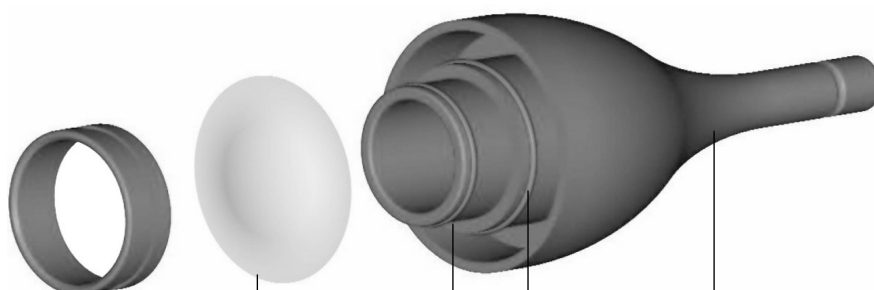


Illustration 8: Components of the mouthpiece — clamping ring, membrane, sealing ring, (sliding ring), mouthpiece

To change the membrane, squeeze the clamping ring together with your thumb and index finger and pull it off the mouthpiece with short (left/right) turning motions (Illustration 9).

Place the new membrane centrally on the mouthpiece and slide the clamping ring over it as far as it will go.

apparently missing a product name between “oder” and “von”. Reproduced faithfully rather than invented — please verify against your archive if the exact product name matters.]

¹⁴e.g. Gigasept, or [product name omitted in source] from Schülke & Mayr, or “Sekusept forte” from Henkel. [Same apparent gap as footnote 13 in the source.]

¹⁵Order original INTEGRAMOUSE® accessories from your LifeTool specialist dealer!



Illustration 9: Removing the clamping ring



Illustration 10: CORRECT — membrane fitted correctly



Illustration 11: INCORRECT — membrane fitted incorrectly

To ensure the membrane functions correctly, its edges must not protrude between the clamping ring and the mouthpiece! (Illustrations 10 and 11)

8. OPERATING CONDITIONS

- The INTEGRAMOUSE® was not designed for outdoor use.
- The INTEGRAMOUSE® operates faultlessly at ambient temperatures between +10 °C and +40 °C, at an air pressure between 700 and 1060 hPa, and at a relative humidity of 30 to 75%.
- Shocks, vibrations and dust can impair the fault-free operation of the INTEGRAMOUSE®.

The INTEGRAMOUSE® is a medical device tested in accordance with EN 55011 Class B, and its use is permitted in normal domestic, office, or comparable environments.

9. FREQUENTLY ASKED QUESTIONS AND ANSWERS

9.1) Do I need specific drivers or software to install it?

No. The INTEGRAMOUSE® is automatically recognised as the default mouse and installed on your operating system (from Windows 98 SE).

9.2) I don't have the strength needed to operate the mouse buttons by sipping or puffing. Can I change the sensitivity of the sip/puff pulse?

The sip/puff pulse required for the INTEGRAMOUSE® has been set to a specific range at the factory and cannot be changed. However, you can connect external buttons or sensors to the distributor box to trigger the left and/or right mouse button.

9.3) Can I adjust the speed of the mouse cursor?

Yes. You can adjust the speed of your mouse cursor in the mouse control options of your operating system (in Windows: Start/Settings/Control Panel/Mouse).

9.4) Can I change or swap the assignment of the mouse buttons?

Yes. In the mouse control options of your operating system (see 9.3).

9.5) Can I adjust the double-click speed?

Yes. In the mouse control options of your operating system (see 9.3).

9.6) Can I also use the INTEGRAMOUSE® with Apple® or Linux®?

Yes. The INTEGRAMOUSE® can be used with Mac OS X or later versions. In most cases, the connection works using the plug-and-play procedure. In rare cases, the plug-and-play connection does not work. In these cases, disconnect all other USB-connected devices, then reconnect the INTEGRAMOUSE® to your Macintosh computer. Once the INTEGRAMOUSE® has been installed automatically, reconnect the other devices via USB.

The INTEGRAMOUSE® should work with all Linux operating systems that support USB.

9.7) Can I write texts with the INTEGRAMOUSE®?

Yes. Windows XP offers a free on-screen keyboard under Start/Programs/Accessories/Accessibility. Your LifeTool specialist dealer will be happy to offer you more convenient, paid on-screen keyboards (e.g. with word prediction).

9.8) After installing the INTEGRAMOUSE®, the mouse cursor can no longer be moved:

Press the reset button on the distributor box. Please note that the mouthpiece must not be moved for approximately 5 seconds after connecting the INTEGRAMOUSE® to a USB port on your computer.

9.9) After changing the mouthpiece, the mouse cursor can no longer be moved:

Press the reset button on the distributor box. The mouthpiece is correctly fitted when a small gap (0.3 to 0.4 mm) remains between the control unit and the mouthpiece (Illustration 7).

9.10) After changing the membrane, the mouse buttons can no longer be triggered:

To ensure the membrane functions correctly, its edges must not protrude between the clamping ring and the mouthpiece (Illustrations 10 and 11).

9.11) After cleaning, the mouthpiece will not fit, or only fits with difficulty, onto the control unit:

Cleaning causes the mouthpiece to expand, so it no longer fits optimally onto the control unit. Before reusing the cleaned mouthpiece, please make sure it is completely dry and has cooled to room temperature.

9.12) The mouse cursor moves across the screen on its own?

Please press the reset button to recalibrate the INTEGRAMOUSE®.

9.14) Can I use the INTEGRAMOUSE® for environmental control?

The INTEGRAMOUSE® is a computer mouse and may only be connected to environmental control systems intended for use with a computer mouse.

Note: the source document's question numbering skips from 9.12 to 9.14 (no 9.13 exists in the original); this has been preserved as in the source.

10. WHO CAN I CONTACT WITH TECHNICAL QUESTIONS ABOUT THE INTEGRAMOUSE®?

For warranty claims and repairs, please send the IntegraMouse® to an authorised LifeTool specialist dealer¹⁶. Before sending your IntegraMouse® in for repair, please clean and disinfect the mouthpiece and the housing of the IntegraMouse® to avoid infection or contamination during the repair. LifeTool reserves the right to invoice any resulting cleaning costs separately. Return shipping is at your own expense.

For further questions, please contact an authorised LifeTool specialist dealer¹⁷, or:

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<http://www.integramouse.com>

11. ENVIRONMENTAL PROTECTION NOTES

Please do not dispose of packaging material and devices that have reached the end of their service life as ordinary waste; instead, take them for recycling or proper disposal.

¹⁶An up-to-date list of all LifeTool specialist dealers can be found online at <http://www.integramouse.com>.

¹⁷An up-to-date list of all LifeTool specialist dealers can be found online at <http://www.integramouse.com>. [Translator's note: source footnote 17 was truncated at a page boundary in the scanned original; assumed identical to footnote 16, which attaches to the same recurring phrase. Please verify against your archive copy if precision matters.]

12. TECHNICAL DATA AND EXPLANATION OF SYMBOLS

Power supply: via USB interface: 5 V / 150 mA

Connection to computer: via USB interface – USB 1.1, compatible with USB 2.0. The device operates as a HID-compliant mouse input device.

Electromagnetic compatibility: in accordance with EN 55011 Class B, EN 61000-3-2, EN 61000-3-3, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, EN 61000-4-11

Protection class: 2, EN 60529/IP53, Type B application part

Weight: Control unit complete: approx. 140 g

Distributor box complete: approx. 140 g

Dimensions: Overall length (mouthpiece, control unit, cap): 160 mm

Diameter of control unit (without base): 36 mm

Materials: Control unit housing and base: AlMgSi1

Mouthpiece and cap: technical plastic "TECAFORM AH MT red", tested for biocompatibility in accordance with the cytotoxicity test per ISO 10993-5:1999.

Membrane: latex (latex-free membrane available as an accessory)

Explanation of symbols



Caution: follow the user manual / instructions for use



Type B application part

SN Serial number

CE Conformity mark in accordance with EU Directive 93/42/EEC



Disposal in accordance with Directive 2002/96/EC

Product service life: The year of manufacture of the IntegraMouse® is indicated in the four digits of the serial number (SNXXXX) on the distributor box. The service life of the IntegraMouse® is 6 years from delivery (date of delivery note/invoice), and no more than 8 years from the stated year of manufacture.

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