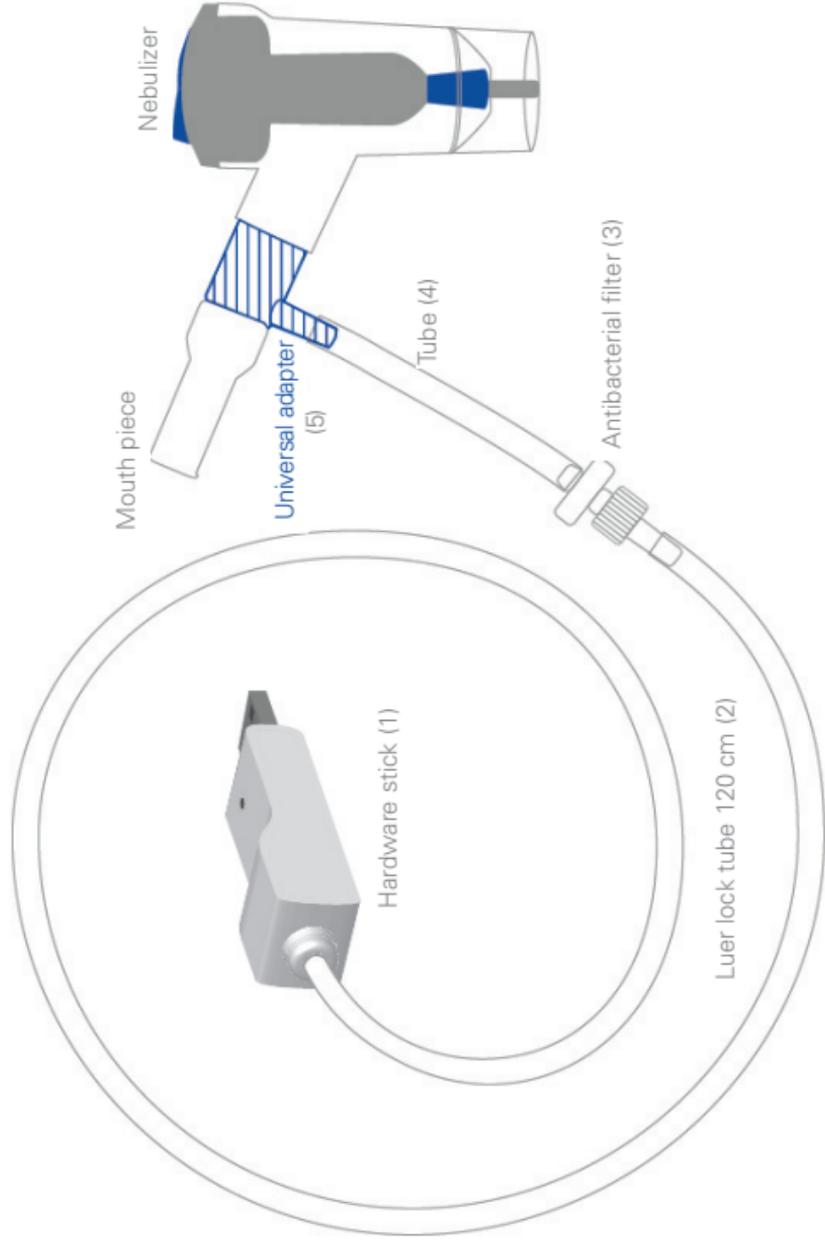


JOPPA[®] STICK

User Manual





Before first using the device, it is necessary to read the user manual carefully. Keep the manual in a safe place so that you can refer to it whenever necessary.

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1. Symbol description

 **0123** EC declaration of conformity



Warnings and cautions



Manufacturer



Part number



Serial number



The device, accessories and the packing have to be disposed correctly at the end of usage
Please follow local ordinances for disposal.



Protection class II

2. Cautions and warnings



Please observe the technical requirements of the compressor and the inhalation accessories.



JORDI®STICK is to be used exclusively in combination with an inhalation system for the treatment of respiratory diseases.



Software and hardware are to be used exclusively for this purpose.



The device may be used only in dry surroundings.

3. Safety instruction and claims

Since the product JORDI®STICK training game inhalation is to be used together with an inhalation device and a computer, the user manuals of these devices have to be followed.

 Please observe the user manuals of the electronic devices connected with the JORDI®STICK

Before using the JORDI®STICK please make sure that all used components are undamaged; otherwise please contact the respective authorized service partner. Expected life span: 2 years.

The average life span of the inhalation accessories is one year. However, if you are using the device frequently, it is recommended to change the accessories every 6 months or sooner in order to ensure maximum therapeutic effect.

 **Caution:**

The JORDI®STICK must be connected exclusively to USB connectors of devices compliant with CE.

Children or persons in need of care should always be supervised by an adult during application in order to ensure a successful inhalation therapy.

Some parts of the device are very small and can be swallowed by children. Therefore please store the device out of reach of children.

 Device contains small parts which can be swallowed by children

The housing of the USB stick is not water resistant. Take care not to clean the stick with liquids.

Do not place the device near any heating source such as an heater.



Do not use the device at extreme temperatures.

Before using the device, make sure that the tubing and the filter are not blocked.

The manufacturer, seller and importer are liable for the safety and performance of the device only if the product is used according to the user manual.

In case of dizziness, shortness of breath or headache during therapy, please stop at once and contact your physician.

Claims:

The manufacturer shall not be held liable for any damages in case of:

- Tampering, modifying, adding expansion features, repair by persons who have not been authorized by the manufacturer.
- Using accessory and spare parts which are not recommended by us or not registered formally.
- Using the device in a different way from what has been described in the manual.

4. Introduction

4.1 Intended use

MPV MEDICAL offers new, innovative solutions for successful inhalation therapies and treatments.

Our goal is a more attractive inhalation therapy especially for children.

JORDI®STICK should increase the compliance of the patient and support a playful approach to inhalation for children.

JORDI®STICK - the training game inhalation leads and accompanies the patient throughout inhalation therapy.

The combination of visual motivation and innovative inhalation technology enables a therapy suitable for children.

4.2 Indications

The JORDI®STICK is an optional accessory to be used with an inhalation device in order to increase compliance of the patient, especially children.

4.3 Contraindication

At the moment there are no known contraindications.

4.4 Interactions

The materials used that come into contact with medications have been tested with a wide range of medications. However, due to the variety and continuous evolution of medications the possibility of a chemical interaction cannot be excluded. We recommend that once the medication has been opened, you should use it as soon as possible and avoid prolonged contact of the medication with the nebulizer accessories.

The manufacturer should be contacted for reported problems and/or unexpected events related to device operation.

5. Description of the device

5.1 Components JORDI®STICK training game inhalation



Content:

- 1x JORDI®STICK hardware stick (1)
- 1x JORDI®STICK luer lock tube 120 cm (long silicone tube with luer lock connector) (2)
- 2x JORDI®STICK antibacterial filter (connection between JORDI®STICK luer lock tube and JORDI®STICK replacement tube) (3)
- 8x JORDI®STICK tube 10 cm (4)
- 1x JORDI®STICK universal adapter (connection between mouthpiece and nebulizer with conical shape for commercial nebulizers) (5)
- 1x JORDI®STICK software CD / software download (6)
- 1x JORDI®STICK user manual (7)

Fig. A

Not included in delivery:

- Mouth piece (or mask)
- Nebulizer

5.2 Requirements for use

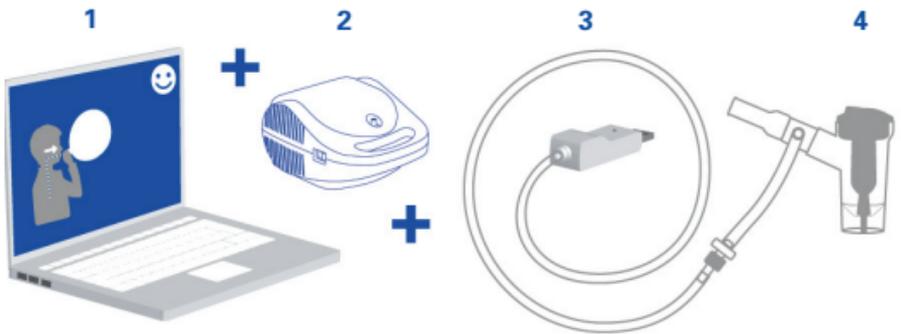


Fig. B

- (1) Computer including JORDI®STICK software
- (2) Inhalation device
- (3) JORDI®STICK hardware stick including tube, filter and universal adapter
- (4) Nebulizer and mouth piece (or mask)

In addition to the JORDI®STICK you need a computer and an inhalation device including nebulizer in order to be able to use the training game.



Fig. C

5.3 Functional description

The JORDI®STICK training game is based on a combination of hard- and software.

The pressure change which is generated during inhalation is measured in the USB stick by the pressure connector in the JORDI®STICK universal adapter (5) and converted into electronic signals. These signals then control several computer programs. The software is designed in a way that the user can move figures and objects in the computer games by inhalation and is thereby learning the correct inhalation technique. Thus the inhalation device has turned into a joystick.



The JORDI®STICK universal adapter (5) is compatible with commercial inhalation systems.*

You need a computer, an inhalation device incl. nebulizer and all components of the JORDI®STICK in order to be able to use the training game.

* Please note that there are manufacturers of inhalation devices whose intended use of their product strictly prohibits the use of accessories from other manufacturers!

Components JORDI®STICK – Training game inhalation

(1) JORDI®STICK hardware stick

Connection accessories:

(2) JORDI®STICK luer lock 120 cm silicone tube
(long connection tube with luer lock connector)

(3) JORDI®STICK antibacterial filter

(4) JORDI®STICK tube 10 cm (for connection between
universal adapter and antibacterial filter)

(5) JORDI®STICK universal adapter

(6) JORDI®STICK software CD / software download



Fig. D

6. Instructions for use

6.1 General

Before each use the JORDI®STICK universal adapter (5) has to be cleaned according to the instructions in the section “Cleaning and maintenance”.

The nebulizer and other accessories not included in the delivery must also be cleaned before each use according to their user manuals.

It is recommended that the JORDI®STICK universal adapter (5) and the other accessories are always used by the same person in order to avoid infection.

For more patients (e.g. brothers and sisters) we recommend to use the JORDI®STICK replacement set (see page 39).

6.2 Software installation



Note

At first please install the software and when the installation is completed, connect the hardware stick and the other components according to the assembly diagram.

System requirements

- Operating system:
Windows XP, Windows Vista, Windows 7, Windows 8
 - Processor:
2,33 GHz Intel® Pentium 4 or AMD Athlon® 64 2800+
or higher
 - RAM:
512 MB or higher
 - Graphic RAM:
128 MB or higher
 - Hard disc:
≥ 20 MB-
 - Sound system
 - USB port:
≥ 2.0
 - CD ROM or internet connection for download
1. Start your computer.
 2. If you use a CD ROM insert the JORDI®STICK software CD (6). The installation should start automatically. Follow the setup instructions.
 3. If no CD ROM is available, make sure that you have an internet connection and follow the link:
www.jordistick.de .

Software installation



After inserting the CD or starting the download link the setup window appears.

Please press the button "weiter".



Please read the licensing agreement and the safety instructions carefully. Please accept the license agreement and press the button "weiter".



Please accept the safety advice and press the button "weiter".



The JORDI®STICK driver will be assigned automatically. Please press the button "weiter".

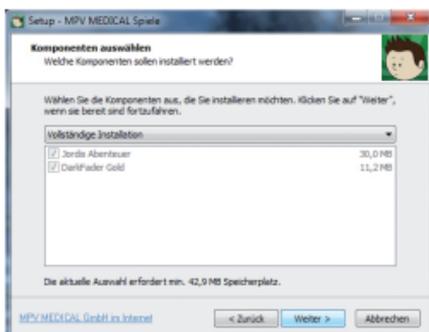
Note:

At first please complete the installation of the software and the driver. When the installation is completed, connect the hardware stick and the other components according to the assembly diagram.

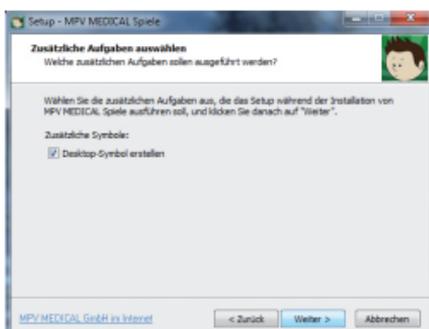


Note:

A failure of the driver installation may be possible due to firewall and / or antivirus settings. In this case you should change the settings and allow access for the driver installation.



If you want to install all programs shown, press the button "weiter", otherwise select the desired program.

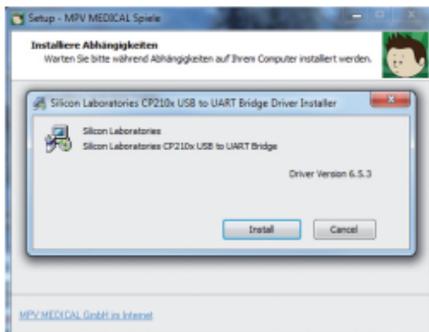


Now you can decide if you want a desktop icon. If you want one, mark the box "Desktop Symbol erstellen" and press the button "weiter".

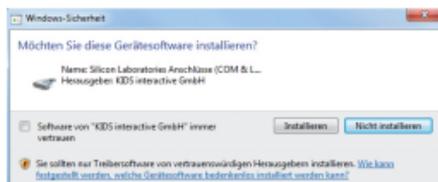
Select the appropriate option and click on „weiter“.



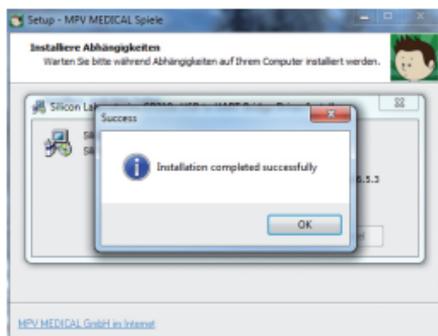
The next window shows the overview of your selection. If everything is fine, press the button "installieren".



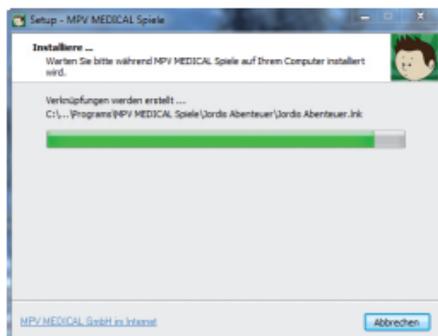
Now the installation for the USB driver starts if you press the button "install".



A similar window may appear depending on your firewall / antivirus software. Press the button "installieren". Should the installation be prevented by your firewall / antivirus software, it has to be deactivated for the duration of the installation.



After a successful installation of the USB driver this window appears. Press the button "OK".



The installation of the JORDI®STICK software begins automatically.



After successful installation of the software this window appears. Press the button "Fertigstellen".

 **Note:**

The installation of further bonus games has to be done according to the procedure described in 6.2.



6.3 Assembly

The assembly diagram can be found on pages 17 and 18.

1. Connect the JORDI®STICK 120 cm luer lock tube (2) firmly with the pressure connector of the JORDI®STICK hardware stick (1).
2. Connect the male JORDI®STICK luer lock (2) connector from the JORDI®STICK 120 cm tube with the female luer lock connector from the JORDI®STICK antibacterial filter (3).
3. Connect the JORDI®STICK tube 10 cm (4) with the other end of the JORDI®STICK antibacterial filter (3).
4. Connect the other end of the JORDI®STICK 10 cm (4) tube with the tube connector of the JORDI®STICK universal adapter (5). The tube connector of the JORDI®STICK universal adapter (5) should be mounted approx. 45° upwards.
5. The JORDI®STICK universal adapter (5) should be inserted between the mouth piece (or mask) and the nebulizer.

6.4 General connection diagram

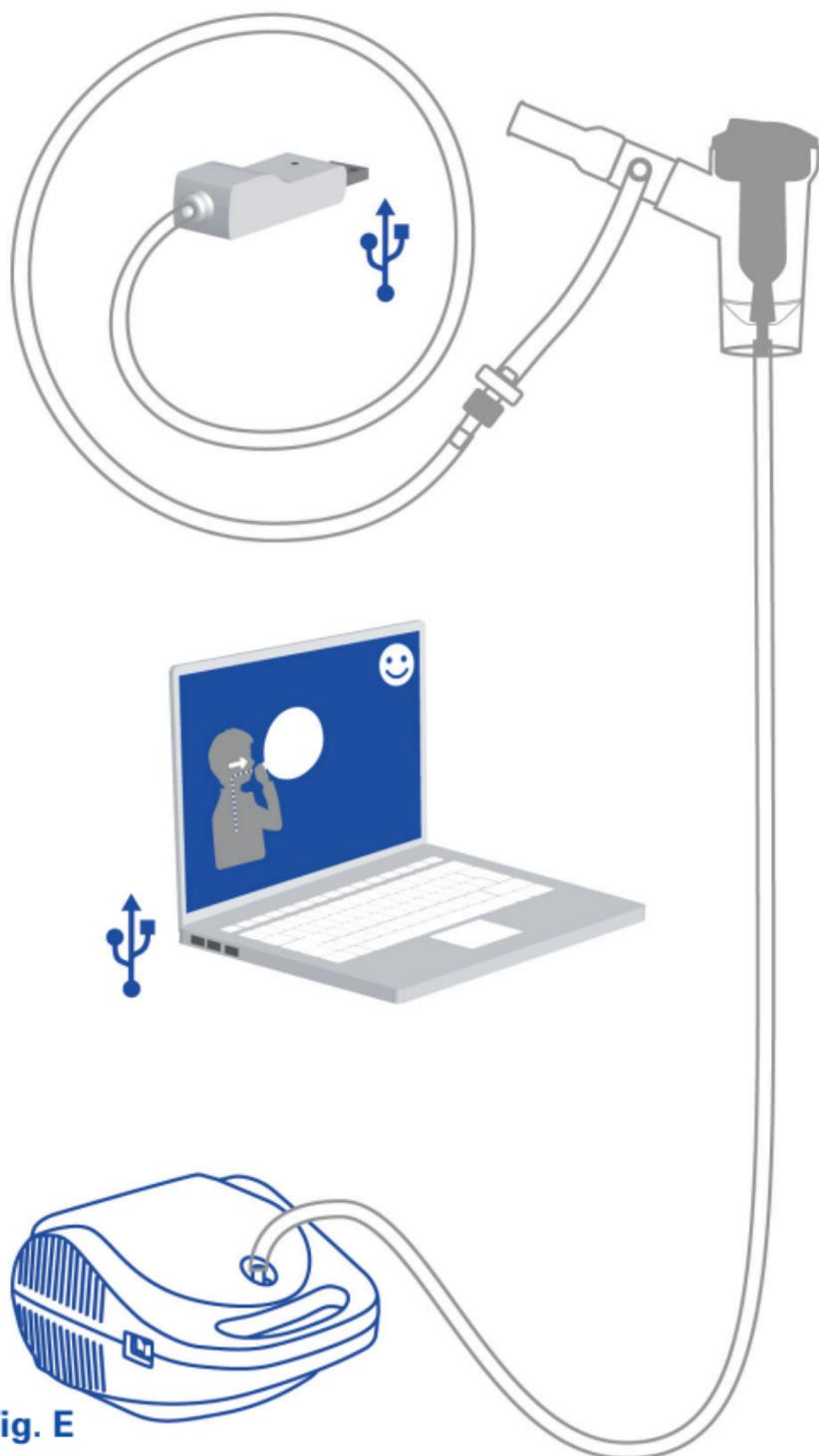


Fig. E

JORDI®STICK - training game inhalation combined with an inhalation device

6.5 Assembly diagram JORDI®STICK with nebulizer

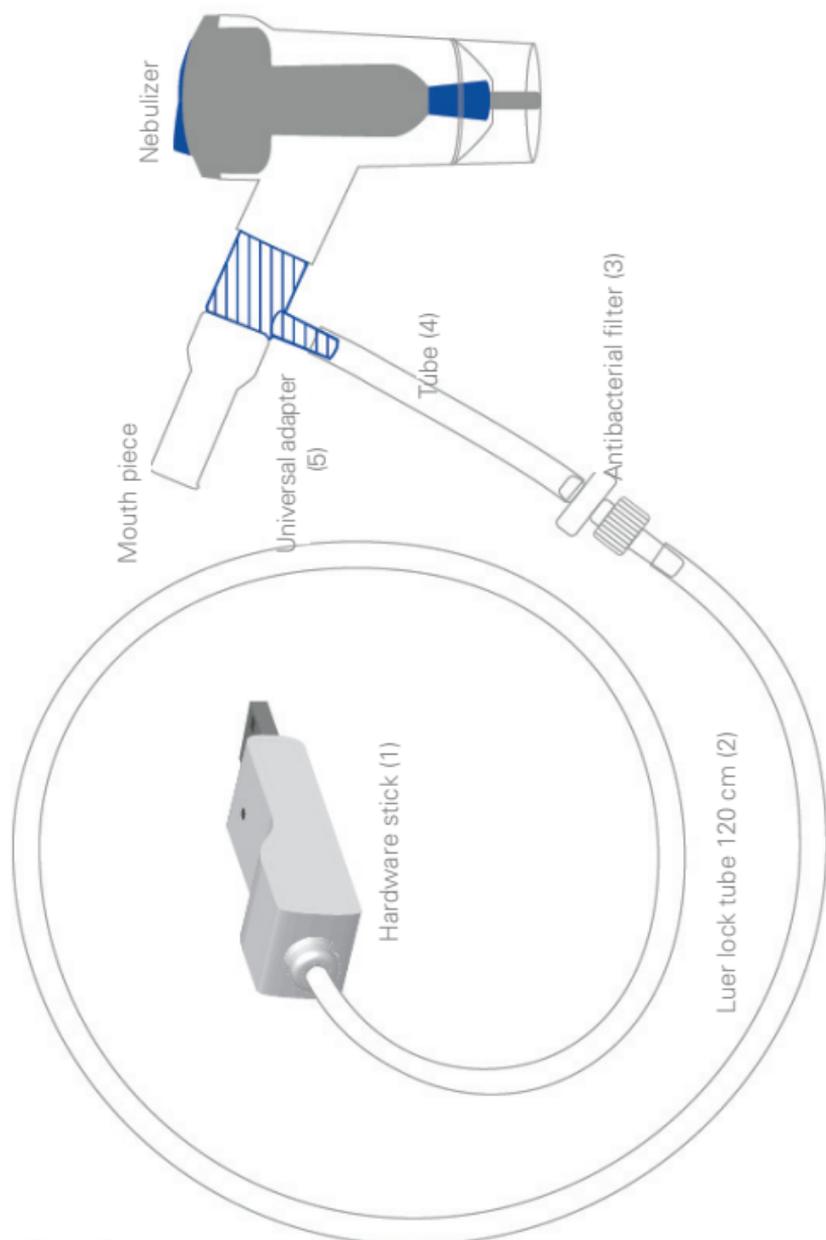


Fig. F



Note:



The JORDI®STICK tube connector of the JORDI®STICK universal adapter (5) should be mounted approx. 45° upwards.

6.6. JORDI®STICK training games



Dark Fader



Jordis Abenteuer

Now you can select which game you want to play. We recommend to start with the training program “Dark Fader”, because the young patients can observe the graphic display of their inhalation and exhalation.



Important note:

The therapy and application has to be supervised by an adult. Explain to your child that calmly inhaling and exhaling is much more effective than hectic or forceful inhalation or exhalation. Uncontrolled and hectic breathing may cause dizziness and fainting and has to be avoided.

Even and steady breathing will ensure a successful game.



6.6.1. The training: Dark Fader

The “Dark Fader” shows a little boy with a balloon on your desktop. After pressing the start button in the middle of the display, the program starts. When the patient inhales, the balloon gets smaller and disappears, when the patient exhales, the balloon gets big again.



Breathe according to the direction of the arrow.

⚠ The settings for therapy and dosage should be done in consultation with a doctor or a therapist.

Inhalation force, inhalation time and inhalation break can be adapted individually to the patient.

Information window

Close the settings

Grundeinstellungen

Smiley sichtbar:

Ballon sichtbar:

Zähler sichtbar:

Akustische Erinnerung:

Einatemzyklen: 70

Dauer Einatmen: 0.7 Sekunden

Erinnerung nach: 8 Sekunden

Atempause: 0.6 Sekunden

Dauer Ausatmen: 0.8 Sekunden

Minimale Einatemkraft: 1

Maximale Einatemkraft: 45

Automatisches Ausatmen:

Zurücksetzen Speichern und spielen

Reset **Safe and play**

Explanation of settings

Smiley sichtbar: When the smiley is activated, it appears top right on the screen.

Ballon sichtbar: When the balloon is activated, it appears at the mouth of the boy.

Zähler sichtbar: When the counter is activated, the breaths are counted.

- Akustische Erinnerung:** When the acoustic reminder is activated, an alarm will sound as soon as there is no more inhalation.
- Einatemzyklen:** Number of breaths taken via the nebulizer.
- Dauer Einatmen:** The less seconds are shown here, the faster the breaths are counted.
(in seconds)
- Erinnerung nach:** Maximum time between two breaths. If this time is exceeded, the screen darkens and / or an acoustic signal sounds.
(in seconds)
- Atempause:** Time of inhalation break
(Time of break between inhalation and exhalation).
(in seconds)
- Dauer Ausatmen:** Time of exhalation.
(in seconds)
- Minimale Einatemkraft:** If the controller of the minimum inhalation force is far left (e.g. at 1), the boy reacts already while breathing lightly / weakly.
- Maximale Einatemkraft:** If the maximum inhalation force is great (e.g. at 50), i.e. the controller is far right, the boy also reacts while breathing forcefully.
- Automatisches Ausatmen:** When automatic exhalation is activated, the balloon boy automatically inflates the balloon without impulse from the patient.

Zurücksetzen:

Click here in order to revert to basic settings.

Speichern und Spielen:

Click here in order to save the chosen settings and start the game.

 **Note:**

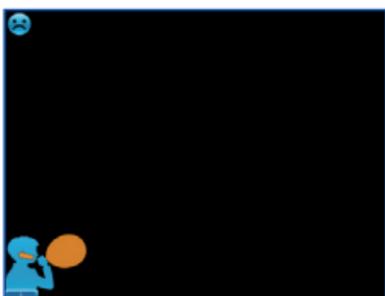
The lower the difference between minimal and maximal inhalation force is, the more controlled and evenly the patient has to breathe.

The value of the minimal inhalation force must always be smaller than the value of the maximal inhalation force.

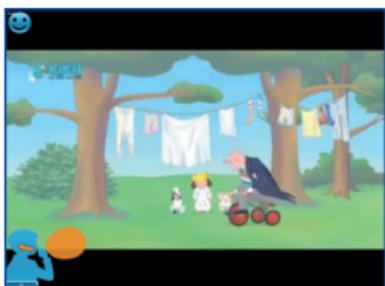
When you click on the boy, he increases in size; when you click again on the boy, he gets smaller.



„Dark Fader“ can be used parallel to any application on the computer or laptop. It is possible to watch a film while observing the little boy on the bottom left.



If the patient forgets to breathe, „Dark Fader“ darkens the entire screen and the smiley top left doesn't smile anymore.



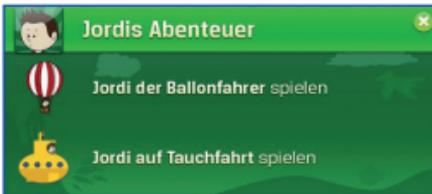
As soon as the patient inhales again, the film or the parallel application reappears.

6.6.2 The games: Jordi's Adventures



Jordis Abenteuer

Start the inhalation game Jordi's Adventures.



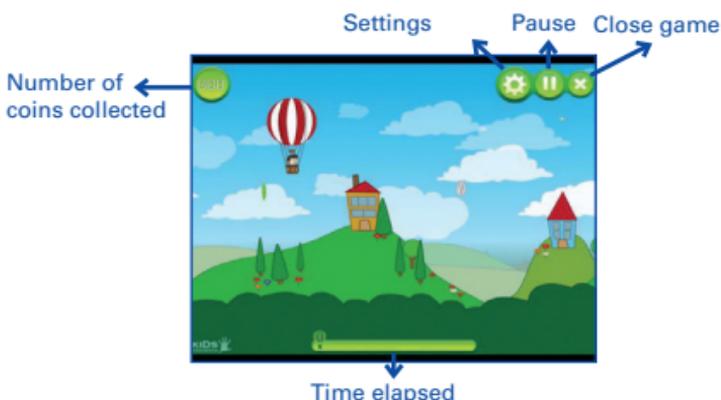
Here you can decide which of the two games "Jordi the balloonist" or "Jordi travelling underwater" you want to play.

If you choose "Jordi the balloonist" a welcome screen appears. There you find a short description of the game:



"Use your balloon in order to collect as many coins as possible. The coins are scattered throughout the complete level. Be careful, hills, high buildings and windmills can slow down the balloon ride. When you inhale, the balloon rises. Look carefully for the green bonus coins: they supply you with a shield and protect you from the next crash." In order to play, press the arrow button.

During the inhalation the following symbols are shown:



If you press the settings button the following information window will appear:



- Spielzeit in Minuten:** Here you can choose the duration of the inhalation.
- Spielgeschwindigkeit:** The higher the set value, the faster the balloon is flying.
- Steiggeschwindigkeit:** The higher the set value, the faster the balloon rises while the patient inhales with the nebulizer.
- Sinkgeschwindigkeit:** The higher the set value, the faster the balloon sinks after inhalation.
- Minimale Einatemkraft:** If the set value is low, i.e. the controller is far left (e.g. at 1), the boy reacts already while inhaling lightly / weakly. Please observe the following note on page 25.

Maximale Einatemkraft:

If the set value is very high, i.e. the controller is far right (e.g. at 50), the boy also reacts while inhaling forcefully.
Please observe the following note.

Spielqualität:

Here you can choose the screen quality.

Analoges Atmen aktiviert:

The boy reacts analogous to the breathing force. The more forceful the inhalation, the faster rises the balloon.

Ton aktiviert:

Here you can mute the game, if desired.

Zurücksetzen:

Click here in order to reset to basic settings.

Speichern und Spielen:

Click here in order to save the chosen settings and to start the game.

 **Note:**

The lower the difference between **minimal and maximal** inhalation force is, the more controlled and evenly the patient has to breathe.

The value of the minimal inhalation force must always be smaller than the value of the maximal inhalation force.

If you choose “Jordi travelling underwater” a welcome screen appears. There you find a short description of the game:



“Use your submarine in order to collect as many coins as possible. The coins are scattered throughout the complete level. Be careful, hills, fish and plants can slow down the submarine ride. When you inhale, the submarine rises. Look carefully for the green bonus coins: they supply you with a shield and protect you from the next crash.”
In order to play, press the arrow button.

The settings of „Jordi travelling underwater” and “Jordi the balloonist” are identical.



6.6.3 The Bonus Game „Jordinaut“



Is not included in delivery!

„Jordinaut“ can be downloaded free of charge at www.jordistick.de.



The Jordinaut is floating around in outer space and it is his job to catch objects and to avoid meteorites. The game is operated by inhalation as well as exhalation which causes the Jordinaut to move either to the left or to the right. The download

contains the bonus game „Jordinaut“ as well as the training game „Dark Fader“ in one installation package.

The game can be installed after a successful download.

Note:

The installation of further bonus games has to be carried out according to the procedure described in 6.2 (see page 12). When you start the program „Jordinaut“, the corresponding welcome screen will appear. There you will find a short description of the game.



„Somebody has left open the door to our space station – all the provisions have been blown away. Quickly put on your space suit and collect as many groceries as possible. However, watch out and don’t collide with any loose meteorites.“

This is how you operate your rocket backpack:

- by inhalation you fly to the left
- by exhalation you fly to the right

When you are ready, click on Start!



7. Cleaning and maintenance

7.1. Recommended replacement intervals of the accessories (with only one user)

JORDI®STICK 10 cm tube (4):
exchange after seven days.

JORDI®STICK antibacterial filter (3):
exchange after one month.

JORDI®STICK luer lock tube 120 cm (2):
exchange after six months.

JORDI®STICK universal adapter (5):
exchange after six months.

However, the components have to be cleaned after every application as described below.

7.2. Cleaning and sanitization

The accumulation of bacteria in the JORDI®STICK antibacterial filter (3) and the JORDI®STICK replacement tube 10 cm (4) has to be avoided. After each application it is necessary to clean and dry all accessories which had contact with the aerosol in order to avoid mold and bacterial growth.

Please disconnect the JORDI®STICK inhalation accessories from the computer and compressor before cleaning. The JORDI®STICK 10 cm tube (4) and the JORDI®STICK antibacterial filter (3) have to be exchanged according to the described time periods.

The JORDI®STICK 10 cm tube (4) and the JORDI®STICK antibacterial filter (3) must be replaced according to 7.1 recommended replacement intervals.

A visual check of the JORDI®STICK antibacterial filter (3) is recommended. The JORDI®STICK antibacterial filter (3) has to be checked regularly regarding discoloration. Don't let the JORDI®STICK antibacterial filter (3) come into contact with water. The shelf life depends, among other, on the intensity of use.

The cleaning and reconditioning is meant for one user only. For other persons (e.g. brothers or sisters) please use the replacement set.
Connection accessories (see page 39).

For the cleaning of the JORDI®STICK hardware stick (1) and the outer surface of the JORDI®STICK luer lock 120 cm tube (2) please only use a cloth moistened with an antibacterial cleaning agent (non-abrasive and without any solvents).

Please clean the JORDI®STICK universal adapter (5) before and after each use. Remove the JORDI®STICK adapter (5) from the mouth piece and JORDI®STICK 10 cm tube (4) and nebulizer. The JORDI®STICK universal adapter (5) consists of a biocompatible material and has to be sanitized according to the standards for commercial nebulizers.

Method A:

Clean the JORDI®STICK universal adapter (5) in warm tap water (approx. 40°C) with a mild dish detergent or in the dish washer.

Method B:

Sanitize the JORDI®STICK universal adapter (5) by putting it in a 60% water and 40% white vinegar solution. Afterwards rinse it with warm water (approx. 40°C).

Method C:

Boil the JORDI®STICK universal adapter (5) for 20 minutes in water. In order to avoid limescale, use demineralized or distilled water.

After cleaning let the JORDI®STICK universal adapter (5) dry, especially the tube connector.



7.3 Disinfection

It is important to sanitize the components before disinfection.

- a) Fill a container with a solution of tap water and electrolytic chloroxidizer (active ingredient sodium hypochlorite) suitable for disinfection according to the dilution proportions recommended in the disinfectant instructions.
- b) Submerge every component completely in the solution; try to avoid air bubbles. Keep the components immersed for the period recommended on the disinfectant instructions.
- c) Remove the disinfected components and rinse them thoroughly under warm tap water. Dry the components as described in the sanitization paragraph. Discard the solution according to the instructions provided by the disinfectant manufacturer.

7.4 Sterilization

Of the accessories included in the delivery only the JORDI®STICK universal adapter (5) can be sterilized. Please read the respective user manuals of the components not included in the delivery, in order to find out if they can be sterilized.

The sterilization procedure described in this paragraph is validated according to ISO 17665-1 and is effective on all components only if the instructions are followed precisely and if the components have been previously sanitized.

Equipment:

Steam sterilizer with fractionated vacuum and overpressure compliant with standard EN 13060.

Execution:

Pack each component to be treated in a sterile barrier system or packing in compliance with standard EN 11607. Place the packed components in the steam sterilizer. Run the sterilization cycle according to the equipment instructions for use max. 121°C for 10 minutes.

Storage:

Store the sterilized components as stated in the instructions for use of the chosen sterile barrier system or packaging.

7.5 Re-use

Before re-using the JORDI®STICK, clean the JORDI®STICK hardware stick (1), the JORDI®STICK 120 cm tube (2), and the JORDI®STICK 10cm tube (4) as described in section 7.2.

The JORDI®STICK 10 cm tube (4) and the JORDI®STICK antibacterial filter (3) have to be replaced according to section 7.1.

The JORDI®STICK universal adapter (5) can be disinfected or sterilized.

8. Material list of the components

- a) JORDI®STICK universal adapter (5):
PP (polypropylene)
- b) JORDI®STICK 10 cm tube (4):
silicone
JORDI®STICK luer lock 120 cm tube (2):
silicone
- c) JORDI®STICK antibacterial filter (3):
hydrophobic PTFE membrane
- d) JORDI®STICK luer lock connector:
nylon

9. Technical data

Protection: class II

Complies with: directive 93/42/EWG, CE0123

Product has been tested according to IP 44.

Supply voltage: DC 5 V

Use: permanent use

Dimensions: 55 mm (H) x 166 mm (L) x 96 mm (W)

Weight: 0,2 kg

Environmental conditions for transport and storage:

temperature: from -25°C without control of relative humidity and + 70°C

at a relative humidity: of up to 93% without condensation.



Environmental conditions during use:

Ambient temperature:	of + 5°C to 40°C
Relative humidity:	of 15% to 93%
Non-condensing air pressure:	of 700 hPa to 1060 hPa.

10. Manufacturer

MPV MEDICAL GmbH
Wernher-von-Braun-Str. 1
D-85640 Putzbrunn
Germany

11. Warranty conditions

- The JORDI®STICK hardware stick (1) is covered by a 2-year warranty from date of purchase for any defects in the design or in the materials used.
- The warranty comprises the replacement and / or repair free of charge of originally defective components.
- The warranty does not cover the accessories supplied with the device and those parts subject to normal wear and tear.
- The device must be repaired by authorized technical service centers only.
- The device must be sent to the authorized service center for repair within 8 days after the defect is noticed.
- Transport costs for the device are at user's charge.
- Any repair out of warranty conditions are at user's charge.
- The warranty does not cover failures resulting from misuse, abuse of the product or in case the damage is not due to manufacturer's liability (accidental fall, rough transportation, etc.).
- The warranty does not involve any compensation for any kind of damages to persons or things, either direct or indirect, occurred when the device is not operating.
- The warranty is valid from the date of purchase certified by the ticket or the invoice.

In case of warranty please send the defect product together with the invoice to the following address:

MPV MEDICAL GmbH
Wernher-von-Braun-Str. 1
D-85640 Putzbrunn
Germany

For further inquiries please call:
Service hotline: +49 (0)89 / 7299700-0
E-Mail: info@mpvmedical.com

12. Service and maintenance

Repairs must be carried out by authorized personnel only, otherwise any warranty claims will expire. The JORDI®STICK is maintenance free.

13. Disposal

In conformity with Directive 2002/96/EC, the symbol shown on the appliance to be disposed of indicates that this is considered as waste and must therefore undergo "sorted waste collection". The user must therefore take (or have taken) the above waste to a presorted waste collection centre set up by the local authorities, or else give it back to the dealer when purchasing a new appliance of the same type. Presorted waste collection and the subsequent treatment, recovery and disposal operations favour the production of appliances made of recycled materials and limit the negative effects of any incorrect waste management on the environment and public health. The unlawful disposal of the product by the user could result in administrative fines as provided by the laws transposing Directive 2002/96/EC of the European member state in which the product is disposed of.

14. Electromagnetic compatibility

This device has been designed to satisfy requirements currently required for electromagnetic compatibility (EN 60 601-1-2:2007). Electrical medical devices require special care. During installation and use with respect to EMC requirements, it is therefore required that they be installed and/or used according to the manufacturer's specification. Potential risk of electromagnetic interference with other devices, in particular with other devices for analysis and treatment. Radio and mobile telecommunications devices or portable RF (mobile phones or wireless connections) may interfere with the operation of electrical medical devices. The manufacturer reserves the right to make technical and functional changes to the product without notice. For additional information please visit www.mpvmedical.com and www.jordistick.de.

Electromagnetic emission

JORDI®STICK is intended for operation in an electromagnetic environment such as those specified below.

The JORDI®STICK customer or user should ensure that it is operated in such an environment.

Interference emission measurements	Level of conformity	Electromagnetic environment - guidelines
HR emissions acc. To CISPR 11	Group 1	JORDI®STICK only uses HF energy for its internal function. Therefore 1st HF emission is very low, and it is improbable that neighbouring electronic devices are disturbed.
HF emissions acc. To CISPR 11	Class B	JORDI®STICK is suitable for use in all facilities, including those in living areas and those immediately connected to a public supply network also supplying buildings, used for residential purposes.
Emission of harmonics acc. to I EC 6100-3-2	Not usable	
Emission after voltage fluctuations / flickers acc. to I EC 61000-3-3	Not usable	

Electromagnetic stability

JORDI®STICK is intended for operation in an electromagnetic environment such as those specified below.

The JORDI®STICK customer or user should ensure that it is operated in such an environment.

Interference immunity tests	IEC 60601 test level	Level of conformity	Electromagnetic environment-guidelines
Discharge of static electricity (ESD) acc. to IEC 6100-4-2	+ / - 6 kV contact discharge + / - 8 kV air discharge	+ / - 6 kV + / - 8 kV	Floors should consist of wood, cement with ceramic tiles. If floor is covered with synthetic material, relative humidity must be at least 30 %.
Rapid transient electrical noises / bursts acc. to IEC 6100-4-4	+ / - 2 kV for power lines + / - 1 kV for input and output ratios	Not usable	The quality of the supply voltage should correspond with that of a typical business or hospital environment.
Surges acc. to IEC 61000-4-5	+ / - 1 kV normal mode rejection + / - 2 kV normal mode voltage	Not usable	The quality of the supply voltage should correspond with that of a typical business or hospital environment.
Voltage drops, short-term interruptions and supply voltage fluctuations acc. to IEC 61000-4-11	< 5% UT (> 95% drop in U-r) for ,/2 period 40% UT (60% drop in Ur) for 5 periods 70% UT (30% drop in Uy) for 25 periods < 5% UT (> 95% drop in Uj) for 5 sec	Not usable	The quality of the supply voltage should correspond with that of a typical business or hospital environment. If the JORDI®STICK user demands continued function during an occurring power supply interruption, we recommend the use of an uninterruptible power supply device or a battery.
Magnetic field in supply frequency (50 / 60 Hz) acc. to IEC 61000-4-8	3 A/m	3 A/m	Magnetic fields during net frequency should comply to values typical in a business and hospital environment.

Note 1: UT is the AC voltage prior to application of the test level.

Electromagnetic stability

JORDI®STICK is intended for operation in an electromagnetic environment such as those specified below.

JORDI®STICK customer or user should ensure that it is operated in such an environment.

Interference immunity tests	IEC 60601 test level	Level of conformity	Electromagnetic environment-guidelines
Conducted HF noises acc. To IEC 6100-4-6	3 V 150 kHz to 80 MHz	(U1) V 3V	<p>Portable and mobile radio devices should not be operated at a lesser distance from JORDI®STICK than the recommended safety distance, including the lines, which was calculated according to transmission frequency for the respective equation. Recommended safety distance:</p> $d = \left[\frac{3,5}{U1} \right] \sqrt{P}$ $d = \left[\frac{3,5}{E1} \right] \sqrt{P} \text{ für 80 MHz bis 800 MHz}$ $d = \left[\frac{3,5}{U1} \right] \sqrt{P} \text{ für 80 MHz bis 800 MHz}$
Emitted HF noises acc. to IEC 6100-4-3	3 V/m 80 MHz to 2,5 GHz	(E1) V/m 3 V/m	<p>With P as nominal power of the transmitter in Watt (W), according to the specifications of the manufacturer of the transmitter, and d as recommended sage distance in meters. An on-site measurement of field strength at all frequencies of stationary radio transmitters should be less than the compliance level. Interference is possible within the vicinity of devices with the following label.</p> 

Note 1: The higher frequency range applies for 80 MHz and 800 MHz.

Note 2: These guidelines may not be applicable in all classes. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

^a The field strength of stationary transmitters such as base stations for cellular phones and mobile radios, amateur radio stations, AM and FM radio and TV transmitters can in theory not be predetermined to an exact degree. A study of the location should be deliberated to determine the electromagnetic environment with regard to stationary transmitters. If measured field strengths exceed the above conformity levels at the site at which JORDI®STICK is used, JORDI®STICK should be observed to prove its intended function. If unusual performance is observed, additional measures may be required, such as a changed alignment or another location for JORDI®STICK.

^b The field strength should be less than (U1) 3 V/m for frequency ranges from 150 kHz to 80 MHz.

Recommended safety distances between portable and mobile HF telecommunication devices and JORDI®STICK

JORDI®STICK is intended for operation in an electromagnetic environment such as those specified below.

The JORDI®STICK customer or user should ensure that it is operated in such an environment.

Transmission rating in (W) Safety distance according to transmitter frequency (m)

Transmission rating in (W)	150 kHz to 80 MHz	80 MHz to 800 MHz	800 MHz to 2,5 GHz
	$d = \left[\frac{3,5}{U1} \right] \sqrt{P}$	$d = \left[\frac{3,5}{E1} \right] \sqrt{P}$	$d = \left[\frac{7}{E1} \right] \sqrt{P}$
0,01	0,12	0,12	0,23
0,1	0,37	0,37	0,74
1	1,17	1,17	2,33
10	3,69	3,69	7,38
100	11,67	11,67	23,33

You can calculate the recommended protective spacing d in metres for external transmitters with a maximum nominal output not provided in the table above using the respective equation for each column, whereby P is the maximum transmitter output in Watt (W) according to information provided by the transmitter.

Note1: The higher frequency range applies for 80 MHz and 800 MHz.

Note 2: These guidelines may not be applicable in all cases. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.



Notice

15. Order information

Article	Part No./ PZN	Description
	M50030-00 PZN: 10080425	JORDI®STICK training game inhalation hardware, software and connection accessories
Replacement set		
	M50030-02 PZN: 11235410	JORDI®STICK replacement set 1x universal adapter, 2x antibacterial filter and 8x 10 cm tube
	M50030-03 PZN: 11235427	JORDI®STICK replacement set nebulizer and accessories 1x universal adapter, 2x antibacterial filter, 8x 10cm tube, 1x luer lock tube 120 cm and 1x MicroDrop® Calimero2 nebulizer set incl. duck clip
Items		
	M50030-10100 PZN: 11235338	JORDI®STICK hardware stick
	M50030-10200 PZN: 11235344	JORDI®STICK 120 cm tube with luer lock
	M50030-10300 PZN: 11235350	JORDI®STICK antibacterial filter
	M50030-10400 PZN: 11235367	JORDI®STICK 10 cm tube (8 pieces)
	M50030-10500 PZN: 11235373	JORDI®STICK universal adapter
	M50030-10600 PZN: 11235396	JORDI®STICK software CD
	M50030-11100	JORDI®STICK user manual



This device complies with the requirements of EU Direktive 93/42/EEC.



DE 32630980

Disposal via collection point or return to MPV MEDICAL.

Made in Germany



MPV MEDICAL GmbH
Wernher-von-Braun-Straße 1
D-85640 Putzbrunn / Germany

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