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## Технические характеристики на устройства анти-храп ASG 341 компании DITTMANN



- Snore stopper with electric stimulation current
- 1 channel system with 2 adhesive electrodes on the inside of the device
- Flexible wristband, individually adjustable up to 22 cm wrist size
- Noise sensitivity from 65 dB (decibel) if background noises in the room are below 55 dB (decibel)
- Contains: 1 snore stopper with adhesive electrodes, 2 spare adhesive electrodes, 3 alcoholic cleaning wipes, 1 instruction manual
- 1 x 1.5 V AAA battery
- Warranty: 24 months

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Dear purchaser,

Congratulations on your purchase of your new snore stopper ASG 341 and thank you for your trust. To ensure optimal functionality and operation of your snore stopper, please first read the instruction manual before using the device. This guarantees a long useful life of this product.



## 1.0 Definition of symbols

The safety symbols shown in this instruction manual contain information relating to the correct use of the snore stopper and your safety.

The symbols refer to the following content:



Read and follow the instruction manual.



**Warning/Danger:** If not used correctly, serious or fatal injuries and damage may occur!



The instructions must be followed at all times!



**Warning/Danger:** The device must not be used by persons with a pacemaker!

## 2.0 Basic information

### 2.1 How does a snore stopper work?

The snore stopper is an electric stimulation device that recognises snoring noises from 65 dB (decibel) in its surrounding environment using a microphone sensor if the surrounding background noises are less than 55 dB (decibel). If the device detects 3 or more consecutive snoring noises, an electric pulse is activated. When wearing the snore stopper, your wrist is connected to 2 adhesive electrodes. These adhesive electrodes transmit the electric pulse from the device through your skin. The intensity of the pulse may be individually adjusted on the device. With the right settings, you will receive a weak pulse which will not wake you. However, it is possible that your subconscious will react to the pulse and lead you to change your sleeping position. Snoring is frequently caused by a blocked respiratory tract. The snore stopper may contribute to a change of sleeping position if you snore, making you stop snoring. This means that the snore stopper can help you to get a good night's sleep.

### 2.2 Information about snoring

Snoring is a rattling sound that is caused by a blockage of the upper respiratory tract in a sleeping person. With increasing age, about 60% of men and about 40% of women are affected. In most people, snoring depends on a certain position of the body while sleeping. Frequently, snoring occurs when sleeping on the back. Snoring can be induced by different irregularities and causes. There are persons who only snore every now and then and then there are persons who snore almost every night. If the snoring becomes too pronounced, even the snoring persons themselves may wake up as a result.

## 3.0 Safety instructions



### 3.1 General safety instructions

- 3.1.1 The snore stopper may not be repaired, used or modified (changed) by the users themselves in case of a defect. If used incorrectly, the stimulation current may cause pain, injuries and burns.
- 3.1.2 If, during the use of the snore stopper, skin alterations, pain, swellings, discomfort or other anomalies occur, you must stop the therapy immediately and seek medical advice.
- 3.1.3 Please remove all metallic objects, such as jewellery, belts, watches and other utensils, before starting the therapy, in order that they do not come into contact with the device.
- 3.1.4 Only use the snore stopper while sleeping and do not perform any other activities while using the device.
- 3.1.5 Should you have any doubts concerning the therapy with the snore stopper, please seek medical advice in advance.
- 3.1.6 Without having sought prior medical advice, do not use the snore stopper on areas that hurt inexplicably, swollen muscles or after a serious muscle injury. The therapy with the snore stopper is not a substitution for a diagnosis and treatment administered by a medical professional.
- 3.1.7 Please store the instruction manual for later reference and hand over the instruction manual if you pass on the snore stopper to third parties. Please make the instruction manual available to third parties. The instruction manual is an integral part of the snore stopper.
- 3.1.8 Misuse and use not in conformity with the application must be avoided.
- 3.1.9 Accessories from other devices may not be used.
- 3.2.0 If, during the usage, anomalies occur, the therapy must be stopped immediately.
- 3.2.1 Please retain the instruction manual during the useful life of the product.
- 3.2.3 Ensure that the snore stopper is not covered by pieces of clothing or other objects (e.g. pillow) when using the device.

### 3.3 Usage/environment for which the snore stopper is suited

- 3.3.1 Only use the snore stopper for the intended use, i.e. for an exterior stimulation-current and low-frequency therapy on the wrist of the human body.
- 3.3.2 The snore stopper is only intended for external application (skin application) on humans for electric stimulation.
- 3.3.3 If not prescribed otherwise by the doctor, we recommend a daily use during the night while sleeping.
- 3.3.4 The sense of intensity may actually depend on the respective daily constitution. Therefore, the intensity may be adjusted to the personal needs using the intensity control of the snore stopper.

## 3.4 Usage/environment for which the snore stopper is not suited



- 3.4.1 The snore stopper may not be used at the same time with other medical and electric devices of any kind.
- 3.4.2 Do not use or wear the snore stopper while bathing, showering or in any other environment with high air humidity. Keep away from any liquids during use. Injuries may occur or the health may be negatively impacted by an increased stimulation or a short circuit – mortal danger!
- 3.4.3 Only use the snore stopper while in bed or sleeping.
- 3.4.4 Do not use the snore stopper near highly flammable substances and gases or near explosives.
- 3.4.5 During the use, the snore stopper may interfere with other electric devices or may be disturbed by other electric devices. Therefore, do not use the snore stopper near other electric devices.
- 3.4.6 Maintain a distance of at least 1.5 metres to shortwave or microwave devices and/or high-frequency surgical devices when using the snore stopper, otherwise there is a risk of skin irritations or burns caused under the electrodes. Do not use the snore stopper on mountains when higher than 3,000 metres.
- 3.4.7 The snore stopper is only intended for private use and not for trade or commercial use.
- 3.4.8 Please note that portable and mobile HF (high frequency) communication devices (e.g. mobile phones) may have an effect on electric medical devices.
- 3.4.9 Electric medical devices are subject to special precaution measures with regard to EMC (electromagnetic compatibility). Please observe the applicable EMC information (page 15-18) pertaining to the installation and use of the device.

## 3.5 Application for which the snore stopper is suited

- 3.5.1 Only use the snore stopper for the intended use, i.e. for an exterior stimulation-current and low-frequency therapy on the wrist of the human body. Seek medical advice concerning therapeutic questions.
- 3.5.2 The snore stopper is only intended for private use and not for trade or commercial use.

## 3.6 Application for which the snore stopper is not suited



- 3.6.1 You must not use the snore stopper in the following circumstances: a. heart diseases and cardiac arrhythmias (may lead to cardiac arrest), b. directly on wounds, c. pregnancy, d. in patients with pace-makers, e. parts of the body with poor circulation, f. in patients with psychological and/or emotional problems, g. in patients with diagnosed dementia (deterioration of mental faculties), h. in patients with a low IQ (intelligent quotient).



- 3.6.2 Please consult your doctor before using the snore stopper in the following circumstances: a. acute diseases, b. sleep disturbances, c. infectious diseases, d. fever, e. blood pressure problems, f. skin diseases, g. after an accident, h. nausea or dizziness, i. onset of illnesses, j. if anomalies occur, k. pain of inexplicable cause, l. diabetes, m. seizures, n. breathing pauses during sleep, o. if pain is not experienced in some parts of the body, p. during pregnancy, q. persons with metal and implants in the body.
- 3.6.3 Do not use the snore stopper if you could hurt yourself as a result of a sudden fright.

## 3.7 Usage by children and adolescents

- 3.7.1 Children may not be treated with this snore stopper.
- 3.7.2 The snore stopper must be stored out of the reach of children and adolescents younger than 18 years of age.
- 3.7.3 Keep the snore stopper out of the reach of children. Children could swallow the small parts and choke. Children could hurt themselves when using the snore stopper.

## 3.8 Using the snore stopper

- 3.8.1 The adhesive electrodes may only be attached to the snore stopper. Please ensure that the device has been switched off during the application or removal of the adhesive electrodes.
- 3.8.2 If you want to reposition the snore stopper during use, make sure that you switch off the device first.
- 3.8.3 Using the snore stopper may result in skin irritations under certain circumstances. If skin irritations, e.g. redness, blisters or itching, occur, the snore stopper should no longer be used! Do not use the snore stopper permanently on the wrist, as this could lead to skin irritations.
- 3.8.4 Before using the device, the areas of skin intended for the adhesive electrodes must be thoroughly cleaned and dried. The skin must be greaseless and clean.
- 3.8.5 Please ensure that the device has been switched off during the application of the adhesive electrodes and the strapping on and removal of the snore stopper.
- 3.8.6 The adhesive electrodes are attached to the snore stopper by the adhesive properties of the electrodes.
- 3.8.7 Every person reacts differently to an electric stimulation. If the therapy is not successful, please seek medical advice.
- 3.8.8 The snore stopper may not be used on parts of the body where the skin is inflamed and open and fresh wounds are present.
- 3.8.9 Please remove the protective foil before attaching the adhesive electrodes. The adhesive strength of the electrodes depends on the condition of the skin, position and number of applications. If the adhesive electrodes no longer completely stick on the surface of the skin, they must be replaced with new adhesive electrodes. The adhesive electrodes must make contact across the entire electrode surface in order to avoid the formation of isolated current densities, which could lead to burns to the skin. Replace the protective foil after using of the device.

- 3.9.0 Avoid contact between the two electrodes. This will cause a short circuit, during which an increased current density flows. This increased current density may lead to burns and injuries.

## 4.0 Where the adhesive electrodes must be attached

- 4.0.1 The adhesive electrodes are attached to the inside of the device. Place the snore stopper against the outside of the wrist. This ensures that the adhesive electrodes are also pressed against the skin surface on the outside of the wrist. Adjust the wristband in order that the snore stopper is pressed against the wrist.
- 4.0.2 Do not use adhesive electrodes with an electrode size smaller than 20 x 25 mm (4.8 cm<sup>2</sup>), as this could lead to the flowing of a too large current density, thereby possibly causing injuries.
- 4.0.3 The size of the adhesive electrodes must not be changed, e.g. by cutting off pieces of the electrodes.

## 4.1 Where the adhesive electrodes must not be attached



- 4.1.1 The adhesive electrodes must not be attached to other parts of the body except the outside of the respective wrist.

## 4.2 Storage/maintenance of the snore stopper

- 4.2.1 The snore stopper is maintenance-free.
- 4.2.2 Do not dismantle or repair the snore stopper; otherwise, technical or physical accidents may occur – warning/mortal danger!
- 4.2.3 If the device is not used for a prolonged period, remove the batteries from the device.
- 4.2.4 If the snore stopper ASG 341 is intended for trade or commercial use, a technical safety inspection is necessary every 2 years in accordance with § 6 MPBetreibV [German Medical Devices Operator Ordinance]. The technical safety inspection must be carried out by a company specialised in medical devices. Further information may be obtained from our service centre (see page 20).

## 4.3 Cleaning and care of the snore stopper

- 4.3.1 The snore stopper must not be exposed to direct sunlight. Do not place the snore stopper on hot surfaces.
- 4.3.2 Gently clean the surfaces of the snore stopper with a soft, damp cloth. Use water to wet the cloth. Use a mild detergent in case of stubborn stains. Ensure that the snore stopper has been switched off. Therefore, you must always remove the batteries before cleaning the device. Let the snore stopper dry completely afterwards. Do not use chemical detergents or abrasive cleaners to clean the snore stopper or the adhesive electrodes.
- 4.3.3 For hygienic reasons, every user should use his/her own adhesive electrodes.
- 4.3.4 A suitable, commercially available disinfectant may be used for disinfecting the device. Let the snore stopper dry completely afterwards.
- 4.3.5 Do not immerse the snore stopper in water or other liquids.



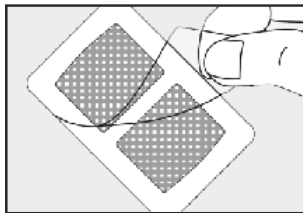
## 5.0 Scope of delivery/contents of packaging



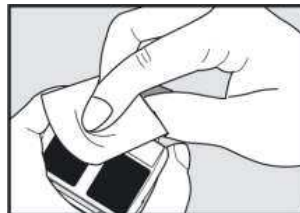
1 snore stopper ASG 341



1 instruction manual



3 x adhesive electrodes



3 x alcoholic cleaning  
wipes



1 x 1.5 V battery AAA

## 6.0 Information about noise sources, noise scale up to 70 dB (decibel)

### 6.1 Noise sources and possible health effects:

- 0 dB: Hearing threshold of humans.
- 10 dB: Rushing of leaves, normal breathing of a human.
- 20 dB: Quiet garden, whispering, quiet room.
- 30 dB: Noise from the refrigerator, noise from side streets.
- 40 dB: Quiet conversation. Sleep disturbances may occur. Learning and concentration disorders are possible.
- 50 dB: Normal conversation (approx. 1 m away), ambient noise level.
- 60 dB: Stress threshold is reached. Noisy conversation.
- 65 dB: Possible onset of damages of the autonomic nervous system. Increased risk of cardiovascular disorders.
- 70 dB: Household noise level, vacuum cleaner.

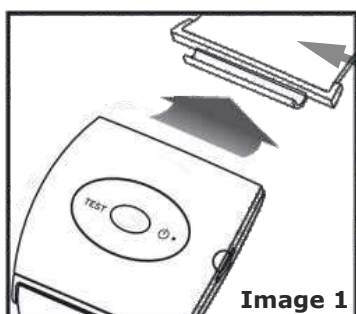
## 7.0 Disposal of the snore stopper

- 7.1 If the snore stopper is to be recycled, observe the legal regulations concerning disposal. Contact your municipality or a waste disposal company for further information. Dispose of the snore stopper in accordance with the Waste of Electrical and Electronic Equipment Directive 2002/96/EC - WEEE.



## 8.0 Changing the batteries and information about batteries

- 8.1 Place 1 battery (type AAA) in the device as shown in the figure. Observe the correct polarity (+ and – pole).
- 8.2 Type of battery: Only use alkaline batteries for the snore stopper. Rechargeable batteries (batteries: NiMH, NiCd) may not be used.

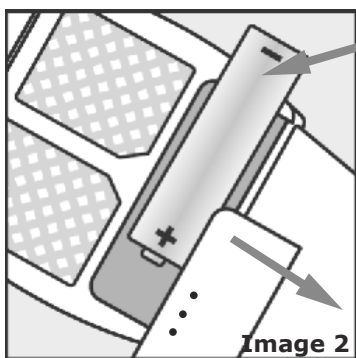


### Step 1:

Open the wristband by pulling up the wristband holder on the housing (see image 1).

### Step 2:

To change the battery, gently push the battery lid down and slide it away from the housing. Observe the correct polarity when inserting the battery. Place the battery lid on the housing and slide it towards the device until the battery lid snaps into place.



### Step 3:

To close the wristband, insert the wristband holder at the side of the housing and push it down until it snaps into place.

- 8.3 - Disposal of batteries: Empty batteries must not be disposed of in the household waste. They must be disposed of through your electronic dealer or public recycling collection point. You as a consumer are legally bound to return empty batteries.
- 8.4 - These symbols denote batteries containing hazardous substances:  
**Pb** = contains lead, **Hg** = contains quicksilver, **Cd** = contains cadmium. **Pb, Hg, Cd**
- 8.5 - If swallowed, batteries can be life-threatening. Therefore, please keep batteries and products out of reach of small children. If a battery was swallowed, seek medical help immediately.
- 8.6 - If a battery leaked, avoid contact with skin, eyes and mucous membranes. Rinse the affected spots extensively with clear water and seek medical help immediately.
- 8.7 - Batteries must not be recharged (except for rechargeable batteries), dismantled, thrown into fire or short-circuited.
- 8.8 - Protect batteries against excessive heat. Remove the batteries from the product, if they are empty or the product will not be used for a longer period. This avoids damage caused by leaking batteries.
- 8.9 - Do not use rechargeable batteries!



**Pb, Hg, Cd**

## 10.0 Application of the snore stopper

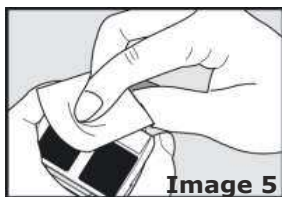


Image 5

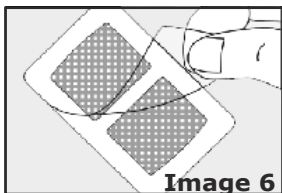


Image 6

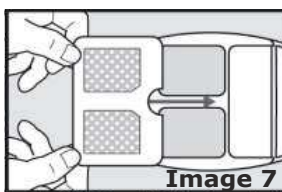


Image 7

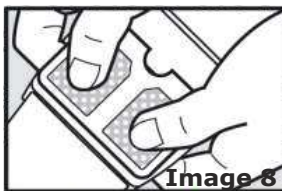


Image 8

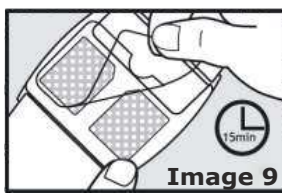


Image 9

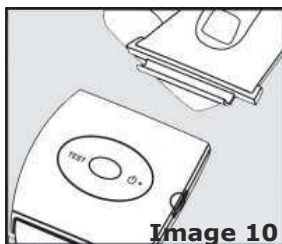


Image 10

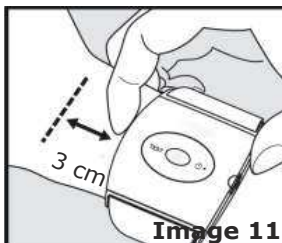


Image 11

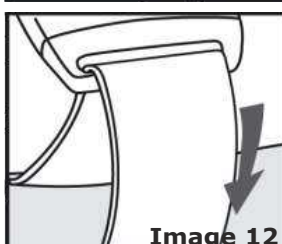


Image 12

### Step 1:

Before attaching the adhesive electrodes, clean the two black electrode pads ⑤ with the enclosed alcoholic cleaning wipe (see image 5) or a commercially available alcoholic cleaning wipe.

### Step 2:

Remove the blue protective foil from the adhesive electrodes as shown in image 6. This protective foil will not be needed for the further application.

### Step 3:

Place the adhesive electrodes with the adhesive outside on the two black rubber pads ⑤ on the backside of the device, so that the surfaces of the black pads and the adhesive electrodes match (image 7).

### Step 4:

Press the adhesive electrodes on the device with both thumbs using a rotating movement to achieve a better adhesion of the adhesive electrodes (image 8). Do not remove the large protective foil!

### Step 5:

Wait for **15 minutes** after the application of the adhesive electrodes, so that the adhesive layer can achieve optimal adhesion. After this is done, the protective foil can be removed (image 9).

### Step 6:

Open the two hook and loop fasteners on the outside of the wristband and unfasten the band until the hook and loop fastener reaches the wristband holder ⑥. Lift off the wristband holder ⑥ to unlock it from the housing (image 10).

### Step 7:

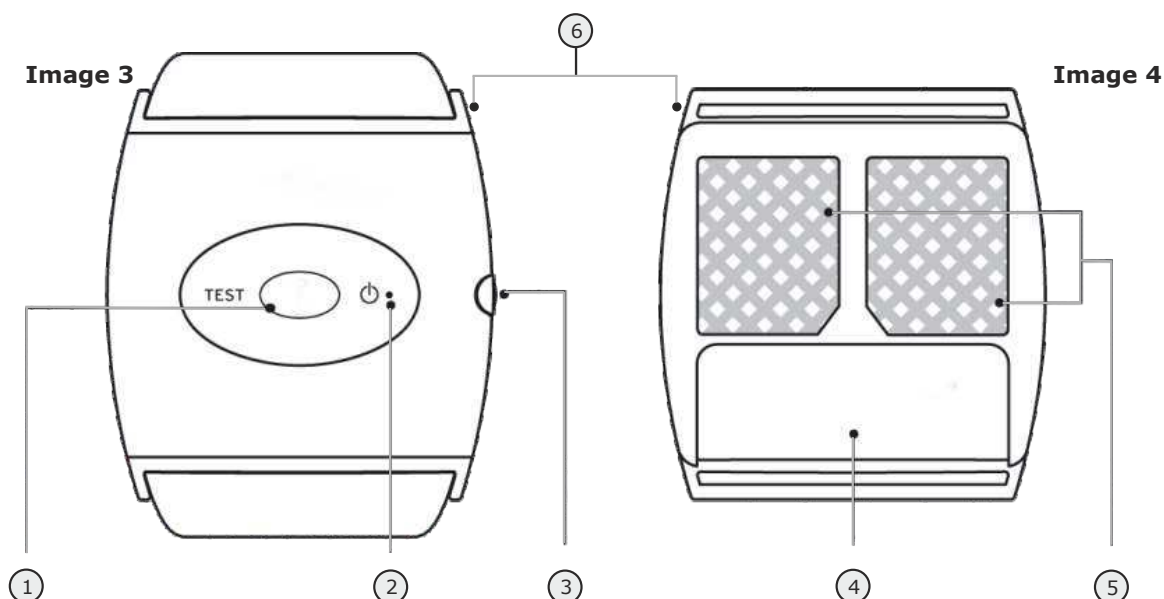
Place the snore stopper about 3 cm away from the wrist and press the snore stopper onto the arm (image 11). Insert the wristband holder ⑥ again und press down to lock it.

### Step 8:

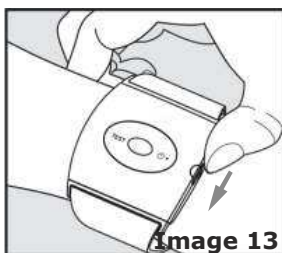
Pull at the two ends of the wristband in order to adjust the device to your lower arm (image 12). If necessary, change the length of the wristband; if it sits too tightly, this could impair the blood circulation.



## 9.0 Designation and function of the snore stopper

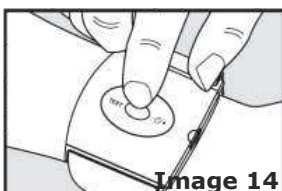


- ① **Test button:** Press the test button ① a total of 3 consecutive times to test the set intensity.
- ② **LED lamp:** The green or red LED lamp ② flashes when the device is switched on.   
If the red LED ② flashes, there is no contact between the adhesive electrodes and the skin surface. The snore stopper is not ready for use.   
If the green LED ② flashes, contact is made between the adhesive electrodes and the skin surface. The snore stopper is ready for use.
- ③ **On/off switch:** In position "0", the device is switched off. By turning the on/off switch ③, you can adjust the intensity in levels from 1 to 7.
- ④ **Battery compartment:** By removing the battery compartment lid ④, the battery (1 x 1.5 V AAA) can be replaced.
- ⑤ **Black rubber pads:** The adhesive electrodes are attached to the two black electrode pads ⑤.
- ⑥ **Wristband holder:** The two wristband holders ⑥ can be removed.



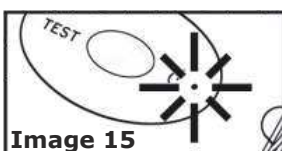
## Step 9:

Switch on the device. Turn the on/off switch (3) to intensity level 2 (image 13). If skin contact is good, the **green** LED (2) flashes once. If skin contact is not good, the **red** LED (2) flashes once (image 15). In this case, tighten the band a little and repeat step 9 until the green LED lights up.



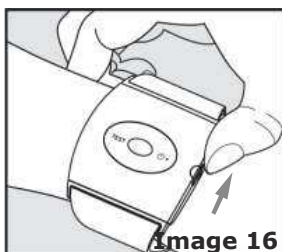
## Step 10:

To test the strength of intensity, press the test button (1) three times in a row. The device activates an electric pulse for about 5 seconds. If you feel that the intensity is too low, increase and test the intensity gradually to adjust it to your needs.



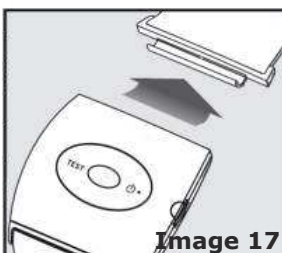
## Step 11:

If the device sends an electric pulse, the green LED (2) flashes during the duration of the pulse (image 15). If the snore stopper detects a noise above 65 dB (decibel), the green LED (2) flashes once. If the red LED (2) flashes, there is no skin contact with the device. Please repeat step 9.



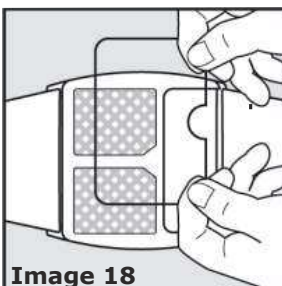
## Step 12:

Please note that the device is set to the required intensity level during the sleep phase. To end the therapy you must first set the intensity button to "0". Switch off the device after waking up and remove the snore stopper from the wrist (see step 13).



## Step 13:

Open the hook and loop fastener on the outside of the wristband, loosen the band until the hook and loop fastener reaches the wristband holder (6). Lift off the wristband holder (6) to unlock it from the housing (image 17).



## Step 14:

Gently remove the snore stopper from the wrist. Now place the protective foil on the adhesive electrodes (image 18). The adhesive electrodes will not get dirty and the useful life is prolonged as a result of this. After 8 hours, the device will switch off automatically. If the snore stopper will not be used for a prolonged period, please remove the battery.

Note: The sense of intensity may actually depend on the respective daily constitution. Therefore, the intensity may be adjusted to the personal needs by the user. The snore stopper also reacts to snoring noises above 65 dB (decibel) emitted from third parties if the background noise in the room is below 55 dB (decibel).

## 11.0 Technical problems, troubleshooting

Fault	Cause	Solution
The batteries are inserted, but there is no signal from the LED lamp.	There could be foreign objects in the battery compartment. Ensure that the batteries are full and are inserted with the correct polarity. Check if the battery contacts make contact.	If foreign objects are present, they must be removed.  Replace the battery with a full one and observe the correct polarity.
	There is a defect in the electronic components.	Remove the battery and replace it again after approx. 3 seconds.
The green LED flashes, but the adhesive electrodes do not transmit any current pulses.	The adhesive electrodes are not attached correctly or no longer make contact with the skin surface.	Check the adhesive electrodes. If necessary, replace with new adhesive electrodes.
An intensity level is set on the device, but there is only a low stimulation felt through the adhesive electrodes.	The battery is not strong enough.	Replace the battery with a full one and observe the correct polarity.
	The skin surface is not clean.	Clean the skin surface.
	The entire adhesive face of the electrodes does not stick anymore and is exhausted.	The adhesive electrodes must be replaced with new ones.
The stimulation current intensity increases, even though a low intensity was selected.	The adhesive electrodes are not fully attached to the skin surface.	Adjust the wristband so that the adhesive electrodes are pressed onto the skin surface.
	The adhesive electrodes only partially stick to the skin surface.	The adhesive electrodes are used up and must be replaced with new ones.
The device stops while in use.	The battery no longer has enough power.	Replace the battery with a full one and observe the correct polarity.
	There is a defect in the electronic components.	Remove the battery and replace it after approx. 3 seconds.
The skin surface shows alterations or is red.	It is possible that the skin alterations are caused by the adhesive electrodes.	Stop the therapy immediately and seek medical advice.



## 12.0 Information regarding electromagnetic immunity

Table 1 – Instruction and manufacturer's specifications – electromagnetic emissions – for all INSTALLATIONS and SYSTEMS (see 6.8.3.201 a) 3).

<b>Instruction and manufacturer's specifications – electromagnetic emissions</b>		
The (INSTALLATION or the SYSTEM) is designed for the use in the electromagnetic environment described below. The customer or the user of the (INSTALLATION or the SYSTEM) should ensure that it is used in such an environment.		
<b>Emission test</b>	<b>Compliance</b>	<b>Electromagnetic environment – instruction</b>
HF emissions CISPR 11	Group 2	The (INSTALLATION or the SYSTEM) only uses HF energy for its internal operation. Therefore, only very low HF emissions occur, which most probably do not cause any malfunctions in nearby electronic installations.


<b>Guidelines and manufacturer's declaration – electromagnetic emissions</b>		
The model ASG 341 is intended for use in an environment as specified below. The customer or the user of the model ASG 341 should ensure that it is used in such an environment.		
<b>Electromagnetic interference measurements</b>	<b>Compliance</b>	<b>Electromagnetic environment – guideline</b>
HF emissions according to CISPR 11	Group 2	The model ASG 341 only uses HF energy for its internal operation. Therefore, its HF emissions are very low, which most probably do not cause any malfunctions in nearby electronic installations.  The model ASG 341 is intended for use in all facilities, including residential environments and such environments that are directly connected to the public power supply, which also supplies buildings that are used for residential purposes.
HF emissions according to CISPR 11	Class B	
Harmonic current emissions according to IEC 61000-3-2	Not applicable	
Emission of voltage fluctuations/flicker according to IEC 61000-3-3	Not applicable	

## 12.0 Information regarding electromagnetic immunity

Guidelines and manufacturer's declaration – electromagnetic immunity			
The model ASG 341 is intended for operation in an electromagnetic environment as specified below. The customer or the user of the model ASG 341 should ensure that it is used in such an environment.			
Immunity tests	IEC 60601 – test level	Conformity level	Electromagnetic environment – guidelines
Electrostatic discharge immunity test according to IEC 61000-4-2	± 6 kV contact discharge ± 8 kV air discharge	Not applicable  ± 8 kV air discharge	Floors should be made of wood or concrete or furnished with ceramic tiles. If the floor is furnished with synthetic material, the relative air humidity must be at least 30%.
Electrical fast transient/burst immunity according to IEC 61000-4-4	± 2 kV for power cables ± 1 kV for input and output cables	Not applicable	The quality of the supply voltage should correspond to the voltage of a typical commercial or hospital environment.
Surges according to IEC 61000-4-5	± 1 kV differential mode voltage ± 2 kV common mode voltage	Not applicable	The quality of the supply voltage should correspond to the voltage of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations according to IEC 61000-4-11	< 5% $U_T$ (>95 % dip of $U_T$ ) during ½ period 40% $U_T$ (60% dip of $U_T$ ) during 5 periods 70% $U_T$ (30% dip of $U_T$ ) during 25 periods < 5% $U_T$ (> 95% dip of $U_T$ ) during 5 s	Not applicable	The quality of the supply voltage should correspond to the voltage of a typical commercial or hospital environment. If the user of the model ASG 341 requires a continuous function also when interruptions in the energy supply occur, it is recommended to supply the model ASG 341 from an uninterruptible power source or a battery.
Magnetic fields at the power frequency (50/60 Hz) according to IEC 61000-4-8	3 A/m	3 A/m	Magnetic fields at the power frequency should correspond to typical values that can be found in a commercial or hospital environment.
<b>NOTE</b> $U_T$ is the alternating mains voltage prior to application of test levels.			



## 12.0 Information regarding electromagnetic immunity

Guidelines and manufacturer's declaration – electromagnetic immunity			
The model ASG 341 is intended for operation in an electromagnetic environment as specified below. The customer or the user of the model should ensure that it is used in such an environment.			
Immunity tests	IEC 60601 – test level	Conformity level	Electromagnetic environment – guidelines
			Portable and mobile radio devices should not be used in closer proximity to the [device or system] including the cables as the recommended protective distance calculated in accordance with the formula for the respective transmission frequency. <b>Recommended protective distance:</b>
Conducted HF disturbances according to IEC 61000-4-6	3 Vrms 150 kHz to 80 Mhz	3 Vrms	$d = 1.2\sqrt{P}$
Radiated HF disturbances according to IEC 61000-4-3	3 V/m 80 MHz to 2.5 Ghz	3 V/m	$d = 1.2\sqrt{P}$ 80 MHz to 800 MHz
			$d = 2.3\sqrt{P}$ 800 MHz to 2.5 GHz
			Where P is the rated power of the transmitter in watt (W) according to the specification of the transmitter manufacturer and d is the recommended protective distance in metres (m). According to an on-site <sup>a</sup> investigation, the field strength of stationary radio transmitters is in all frequencies lower than the conformity level. <sup>b</sup> Disturbances are possible in the vicinity of devices carrying the following symbol.  
<b>NOTE 1</b> For 80 MHz and 800 MHz, the higher value is applicable. <b>NOTE 2</b> These guidelines might not apply to all situations. The spreading of electromagnetic waves is influenced by absorptions and reflections of buildings, objects and people.			

## 12.0 Information regarding electromagnetic immunity

**a.** Theoretically, the field strength of stationary transmitters, such as base stations of wireless telephones and land mobile services, amateur radio stations, AM and FM radio and television stations, cannot be predicted precisely. An investigation of the site is recommended to determine the electromagnetic environment due to stationary HF transmitters. If the determined on-site field strength of the model ASG 341 exceeds the conformity level specified above, the normal operation of the model ASG 341 must be observed at every application site. If unusual performance characteristics are observed, additional measures might have to be taken, such as reorientation or relocation of the model ASG 341. **b.** Not applicable above the frequency range from 150 kHz to 80 Mhz.

Recommended protective distances between portable and mobile HF telecommunication devices and the [DEVICE or the SYSTEM].

The model ASG 341 is intended for operation in an electromagnetic environment in which the HF disturbances are controlled. The customer or user of the model ASG 341 may contribute to the avoidance of electromagnetic disturbances by observing the minimum distance between portable and mobile HF telecommunication devices (transmitters) and the model ASG 341, depending on the output rating of the communication device as specified below.

Rated power of the transmitter W	Protective distance depends on the transmission frequency m		
	150 kHz to 80 Mhz d=1.2 P	80 Mhz to 800 Mhz d=1.2	800 Mhz to 2.5 Ghz d=2.3
<b>0.01</b>	<b>0.12</b>	<b>0.12</b>	<b>0.23</b>
<b>0.1</b>	<b>0.38</b>	<b>0.38</b>	<b>0.73</b>
<b>1</b>	<b>1.2</b>	<b>1.2</b>	<b>2.3</b>
<b>10</b>	<b>3.8</b>	<b>3.8</b>	<b>7.3</b>
<b>100</b>	<b>12</b>	<b>12</b>	<b>23</b>

For transmitters whose rated power is not specified in the table above, the distance can be calculated with the help of the formula of the respective column, with P being the rated power of the transmitter in watt (W) in accordance with the specification of the transmitter manufacturer.

**NOTE 1** For the calculation of the recommended protective distance of transmitters in the frequency range from 80 MHz to 2.5 GHz, an additional factor of 10/3 was used to minimise the possibility that a mobile/portable communication device unintentionally brought into the patient area could lead to disturbances.

**NOTE 2** These guidelines might not apply to all situations. The spreading of electromagnetic waves is influenced by absorptions and reflections of buildings, objects and people.

## 13.0 Technical specification, symbols, pictograms

Model type:	Snore stopper ASG 341
Dimensions (LxWxH):	Housing approx. 65 x 60 x 15 mm
Weight:	Approx. 45 g incl. weight of battery
Adhesive electrode surface:	2 pieces with 20 x 24 mm (4.8 cm <sup>2</sup> )
Material:	Synthetic materials, metal
	Lot designation, <b>LOT</b> V2913ASG341
	Serial number, <b>SN</b> 00001 (consecutive number)
	Date of manufacture, 2013-04 (year, month)
	The snore stopper ASG 341 is certified in accordance with the EU directive 93/42 EEC concerning medical devices.
	Manufacturer: Handelshaus Dittmann GmbH, Kissinger Straße 68, D-97727 Fuchsstadt/Germany
	Protection against electric shock according to type BF (body float). An application device of type BF with a higher protection against electric shock on the body, however, not directly on the heart.

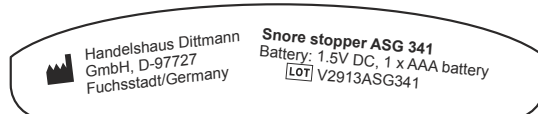
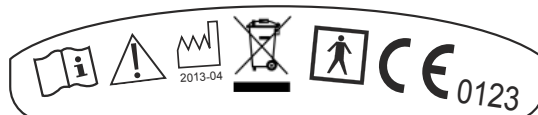
**SN**

 2013-04

**CE** 0123



Device rating plate:



### **Electric specifications:**

Power supply:	1.5 V DC, 1 x AAA battery (V= volt, DC= direct current)
Pulse voltage (V):	5.0 to 33 volt at a load of 1000 ohm
Frequency (HZ):	50 Hz (vibrations per second)
Pulse width (duration):	800 µs (microseconds)
Electric tolerances:	+/- 20% at a load of 1000 ohm
LED facilities:	LED lamps comply with class I
Output channel:	1 channel with adjustable intensity
Automatic shut-off:	After about 8 hours

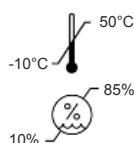
### **Application**

#### **specifications:**

Ambient temperature:	10°C - 40°C (degree Celsius)
Max. air humidity at normal operation:	30% - 85% (percent)
Atmospheric pressure:	700 hPa - 1060 hPa (hectopascal)

#### **Storage/transport specifications:**

	Storage/transport temperature:
	-10°C - 50°C (degree Celsius)
	Max. air humidity during storage and transport:
	10% - 85% (percent)
Atmospheric pressure:	700 hPa - 1060 hPa (hectopascal)



## 14.0 Terms of warranty

The snore stopper ASG 341 has been developed and manufactured with great care.

The statutory warranty period is 24 months as of the purchase date for material and manufacturing defects of the product. Please keep the receipt as proof of the purchase of the snore stopper ASG 341 in order to be able to assert a possible warranty claim.

The warranty does not include:

- damage due to incorrect usage
- defects that were already known to the customer when purchasing the product
- wear and tear parts
- damage due to unauthorised interventions and personal negligence on the customer's part

After the expiration of the warranty period you may send the defective snore stopper ASG 341 to the address specified below for repair. Repairs after the expiration of the warranty period are subject to charge.

Do not hesitate to contact us if technical problems, questions and warranty claims concerning this snore stopper ASG 341 arise:

**NOTE:** Please contact the service centre in the event of a complaint concerning the snore stopper ASG 341!  
If necessary, the service centre will arrange for the collection of the device.  
Only PREPAID parcels are accepted by the service centre!

Архангельск (8182)63-90-72  
Астана (7172)727-132  
Астрахань (8512)99-46-04  
Барнаул (3852)73-04-60  
Белгород (4722)40-23-64  
Брянск (4832)59-03-52  
Владивосток (423)249-28-31  
Волгоград (844)278-03-48  
Вологда (8172)26-41-59  
Воронеж (473)204-51-73  
Екатеринбург (343)384-55-89  
Иваново (4932)77-34-06

Ижевск (3412)26-03-58  
Иркутск (395)279-98-46  
Казань (843)206-01-48  
Калининград (4012)72-03-81  
Калуга (4842)92-23-67  
Кемерово (3842)65-04-62  
Киров (8332)68-02-04  
Краснодар (861)203-40-90  
Красноярск (391)204-63-61  
Курск (4712)77-13-04  
Липецк (4742)52-20-81

Киргизия (996)312-96-26-47

Магнитогорск (3519)55-03-13  
Москва (495)268-04-70  
Мурманск (8152)59-64-93  
Набережные Челны (8552)20-53-41  
Нижний Новгород (831)429-08-12  
Новокузнецк (3843)20-46-81  
Новосибирск (383)227-86-73  
Омск (3812)21-46-40  
Орел (4862)44-53-42  
Оренбург (3532)37-68-04  
Пенза (8412)22-31-16

Россия (495)268-04-70

Пермь (342)205-81-47  
Ростов-на-Дону (863)308-18-15  
Рязань (4912)46-61-64  
Самара (846)206-03-16  
Санкт-Петербург (812)309-46-40  
Саратов (845)249-38-78  
Севастополь (8692)22-31-93  
Симферополь (3652)67-13-56  
Смоленск (4812)29-41-54  
Сочи (862)225-72-31  
Ставрополь (8652)20-65-13

Казахстан (772)734-952-31

Сургут (3462)77-98-35  
Тверь (4822)63-31-35  
Томск (3822)98-41-53  
Тула (4872)74-02-29  
Тюмень (3452)66-21-18  
Ульяновск (8422)24-23-59  
Уфа (347)229-48-12  
Хабаровск (4212)92-98-04  
Челябинск (351)202-03-61  
Череповец (8202)49-02-64  
Ярославль (4852)69-52-93

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