uSonic 700 N

Ultrasound Generator
with Integrated Audio Player

U α

AUDIVO

AUDIVO

Content

1. Introduction

The device uSonic 700N is a portable ultrasound generator with integrated audio player.

It can be used for listening to MP3 files like any other MP3 player.

In addition it enables the user to get into a state of "relaxed concentration" by using special audio files combined with ultrasound. The physiological state of "relaxed concentration" leads to a "feeling of the deep inner centre". This is a feeling of being calm but at the same time wide awake and able to think clearly.

Beyond that there is often a kind of regeneration of the body in terms of energy and well-being.

To support this a combined signal of pink noise and audio-stimuli is modulated onto the ultrasonic sound waves (e.g. isochronic beats, frequency patterns or with a special treatment generated not hearable subliminal-affirmations, ambient noise like „nature" etc.).

The memory card contains the audio-stimulus – in case of the subliminal-affirmations also the plain text to hear it „consciously". Isochronic Beats are short audio-signals that follow in defined intervals with the goal to bring the brain waves into a special mood. Frequency pattern files are a special mix.

The ultrasonic waves that uSonic generates are transferred with so called bodypads to the skin. That's how „information" (like e.g. the affirmation „ I am calm") gets absorbed by the body via vibrations. The information gets unfiltered into the cells and into the subconscious, without being filtered by awareness.

The body and our subconscious can absorb such „information" all the time, that's why uSonic can be used while doing other things or sleeping.

uSonic can be used for relaxation or regeneration; to assist in falling asleep

AUDIVO

or to sleep soundly through the night; for immediate preparation before sporting events or important appointments or business meetings or exams; and to produce a mood of creativity.

In addition uSonic can help to increase concentration by relieving tension or apprehension, to improve efficiency in sports, school and business.

And it can help children with ADD/ADHD to learn by improving concentration skills.

For further details see the uSonic booklet "Relaxed concentration with ultrasound" included in the pack or at www.uSonic.eu

2. Set Up

2.1 Power supply

The uSonic 700N runs with a rechargeable battery of the size of a battery Type AA.

2.2 External connections

2.2.1 Earphones

The earphone socket is located on the bottom of the device, next to the card slot. It is marked with the small legend "phones".

2.2.2 Bodypads (ultrasonic oscillators respectively electrodes)

The socket for the bodypads is located on the upper side of the device, immediately above the PLAY-button.

WARNING!

The plugs for earphones and bodypads are similar. Both cables can be plugged into either socket. Neither the device nor the earphones will be damaged if you do this, but they will not function correctly!

2.3 Memory card insertion (MMC or SD-Card)

Slide slot cover to the left.

Insert the MultiMediaCard- or SD-Card deeply with the beveled corner up-permost and the metal contacts on the bottom.

Close slot cover.

The card can be changed any time the uSonic 700N is in stop- or pause-mode.

Please note:

Don´t force when inserting the card. Light pressure is sufficient.

2.4 To copy own audio data or music to memory card (MMC or SD)

The uSonic 700N is supplied with a pre-formatted MMC or SD card con-taining one of the uSonic subliminal programs. This card is copy protected.

If required, you can overwrite this card with music or other audio files using a card reader attached to a PC. The uSonic 700N can read MMC and SD cards with a capacity of 16 GB. SD and HC cards are supported, SD-XC cards aren't supported yet.

Suitable formats: FAT12, FAT16 and FAT32 (ExtFAT isn't supported. Please have in mind that memory cards with high capacity are possibly delivered with ExtFAT format by the manufacturer).

Supported file formats: MP3 (MPEG1 Layer3) and WAV, 16 Bit, Stereo (HD audio isn't supported yet).

Suitable sample rates: 44.100 Hz and 48.000 Hz (96.000 Hz isn't possible yet).

2.5 Content of Supplied Cards (MMC or SD)

Most of the cards that come with the uSonic device are copy protected and cannot be read with a PC or cardreader.

AUDIVO

Such cards can be re-formatted. After that the content as well as copy protection function will be lost.

Some cards do contain additional information that influence the settings of the device during playing e.g. switching from Buddha mode to Volcano mode.

3. Operation

3.1 Control buttons

(▶II) Switch between play and pause

(≫I) Next track

(I≪) Previous track

(■) Stop

⊳△▽ Click-Wheel (wheel on the right side):
up / down: changes the selection in a list

⊳◁ pressing horizontally confirms the selection in menu or list

(M) Main menu button

3.2 Operation

3.2.1 On/Off switch respective switching between the menus

(M) To turn the device on press for about 2 seconds the orange M-button (menu button).
Once the device is on, use this button to bring you into the so-called „main menu" and back, where you can set the basic options (e.g. pink noise, uSonic mode – "Buddha" or "Volcano", playmode etc.).
To turn the device off, press and hold the orange M-button for about 2 seconds.

Display   Belt Clip   Socket for Bodypads (ultrasonic oscillators)

Click-Wheel
(for navigation)

Play/Pause

Forward

Backward

Stop

Main Menu

Card slot cover   Card slot   Earphone socket

AUDIVO
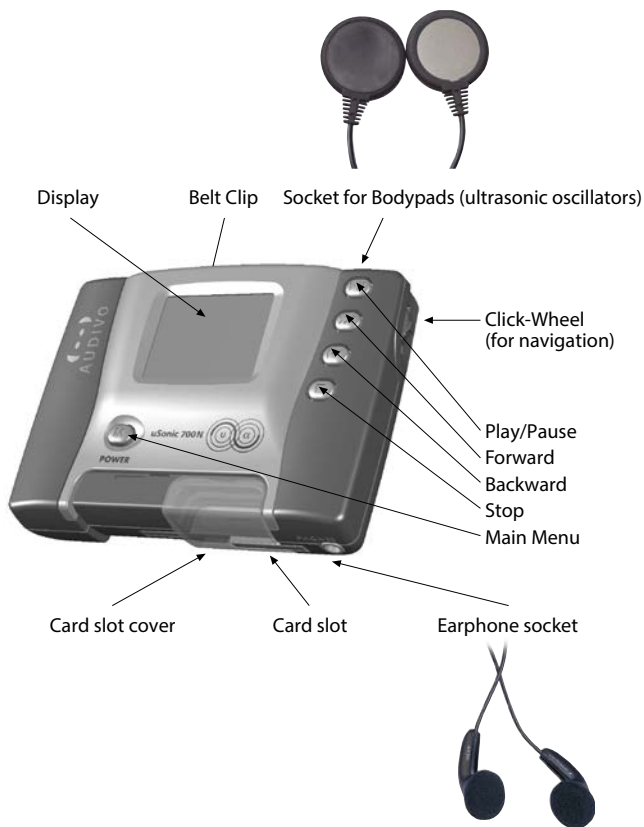
3.2.2 Select files to play / select data

Switch to data selection mode.

⏹ Press stop.

◁ Press the Click-Wheel (horizontally towards the player).

You will then see a list of MP3 files or folders on your memory card. Now you can select a track or a folder for replay:

△▽ By clicking the Click-Wheel up or down you can scroll / go on, up or down in the list.
The selected folder or file is marked by an arrow on the left side.

◁ If you have chosen a title: Press the Click-Wheel vertically to play.

◁ If you have chosen a folder: Press the Click-Wheel horizontally to open.

⏹ One level upwards in the menu

▶II Play selected titles or folders.

3.2.3 Set volume of audio or pink noise

△▽ While a track is being played: Set the volume of the audio file by pressing the Click-Wheel up (louder) or down (calmer).

◁ To set the volume press the Click-Wheel horizontally.

◁ Set the volume of the pink noise by pressing and holding the Click-Wheel for a few seconds, up (louder) or down (calmer). Even at very low volume (e.g. level 2) the pink noise is effective. At high volume it can be unpleasant!

◁ To return to the songlist mode press and hold the Click-Wheel horizontally. The pink noise icon disappears.

3.2.4 Lock button

To prevent you from accidentally handling (e.g. carrying the uSonic device in your pants), you can lock the buttons.

■ Press Stop for a few seconds to activate the lock. In the right bottom corner of the display appears a key.

■ Press Stop again for a few seconds to unlock.

3.3 Main menu (Change replay standard settings)

Ⓜ A short press on the orange M-button while the device is playing will take you into the main menu. This will give you several options (e.g. uSonic mode, pink noise, playmode).

⃝ Scroll up or down the list or go on.

⃝ By pressing the Click-Wheel horizontally you can see the options in the list you have in that menu.

⃝ By pressing the Click-Wheel vertically you can select the desired menu item.

⃝ By pressing the Click-Wheel horizontally the selected item will be stored /saved into the settings.

3.3.1 uSonic mode / Ultrasound mode

There are different ultrasonic frequencies that can be used with different effects:

A) Volcano

The frequency of the ultrasound is 88 kHz.

This frequency acts as a stimulant and strengthens concentration.

Choose the Volcano mode if you are feeling tired, powerless and if you need an energy impulse, a "kick".

AUDIVO

B) Buddha

The frequency of the ultrasound is 44 kHz.

This frequency acts as a calming influence and strengthens concentration

Choose the Buddha mode if you are feeling tense, nervous, or excitable and if you need to "slow down" or "calm down".

C) Off

The ultrasound is in an off-state. Only the audio signal is transmitted through the earphones and/or headphones.

The bar, that shows the flow of the ultrasonic, disappears from the display. Neither an empty rim nor the Buddha man nor the Volcano symbol is visible at the left side of that bar.

D) Individual frequency

Some of the pre recorded cards have frequencies that differ from Buddha and Volcano. Only specialists can define and set this individual frequency. This individual presetting is sent to the player by playing the memory card.

3.3.2 Pure uSonic mode / pure ultrasonic on the bodypads

For some features you need the pure ultrasonic signal on the bodypads. The option „Pure uSonic mode" can be turned on or off by presetting. Choose „WITH audio" for integrating the audio signal to the bodypads (electrodes) or „NO audio" for a pure ultrasound signa without the audio from the memory card.

3.3.3 Pink Noise (broad band full frequency noise)

The interaction of the pink noise, subliminal program (audio file) and ultrasound synchronizes both brain hemispheres and leads to the physiological condition of "relaxed concentration". The volume of the pink noise is adjustable between 0–8 over earphones.

Note that pink noise is effective even at very low volume (e.g. level 2).

3.3.4 Playmode

You can switch between playmodes:

Repeat All / Repeat all files

After having played all the tracks on the memory card, the player starts again from the first track.

Repeat Folder / Repeat all files from this folder

After having played all the tracks in the selected folder, the player starts again with the first track in the folder.

Repeat Single / Repeat this single file

The selected single track is repeated endlessly. This mode is best used if you want to listen to the same data/ the same file several times on the rot.

Continuous/ play all files once

All tracks/files on the card are played once in sequence. After that the re-play is stopped automatically.

3.3.5 Sleep Timer/ Timeout duration

With the help of the sleep timer you can set the duration of the playing before you start. After this settled time the replay is stopped automatically. You can set the time in the menu (by pressing the Click-Wheel up or down) and confirm this by pressing the Click-Wheel vertically. The rest of the re-play time is shown in the display. After a re-start of the uSonic device the sleep timer will be set back on the originally pre-selected time.

3.3.6 Options / Replay options

Resume / Start to play where stopped the file last time

The uSonic device memorizes the last played track. After switching on and pressing the play button, the player restarts at the position where it stopped. If you use copy protected memory cards you shouldn't use re-

AUDIVO

sume at any time, because this could cause problems on the card. Card might „block" itself and show „no card". Only reformatting the card can un-block but then the content is lost.

Auto Play / Automatically start

The player restarts immediately from the position where it stopped before without pressing the play button.

Auto Stop/ Automatically stop

The player stops after every track.

Power Save / Save electricity

The player switches off automatically after a certain number of seconds, if no button is pressed and it is not replaying an audio file.

3.3.7 Display / Screen

Backlight of Screen: You can set the backlight turn off within a time range from 0 to 10 seconds.

Contrast: You can set the contrast from -10 (very dark) up to +10 (very bright). Our suggestion level is 0.

Exit: Exit the menu to set the display.

3.3.8 Player Info

This shows the version and name of the player's hardware and software.

3.3.9 Turn Off

The device switches off (press the M-button for a few seconds).

3.3.10 Display explanation

The following information is shown in the display/on the screen:.

The different symbols mean the following:

00:36	Run time since the start of the file which is currently playing
▶	Current status (play, pause, stop)
T : 001	Track number
xyz.mp3	selected audio data (track name / file name and type of file)
15m	Remaining period of the sleep timer, number of in minutes left.
🌋	uSonic mode (Volcano, Buddha, Individual, Off)
▮▮▯	Efficiency of ultrasonic energy transfer into the body (this bar should be filled dark, which means that the skin resistance is low). If the uSonic is in the „OFF" mode, there isn't even shown the empty frame/rim.
CO	Playmode (Continuous, Single, All, Folder)
▨	Pink noise (is only shown, when the pink noise is changed with the Click-Wheel during the replay)
◢	Volume (audio or pink noise if pink noise icon is shown)
🔋	Battery charge level

A U D I V O

4. Application of ultrasound / Use of the uSonic system

The ultrasound which the uSonic 700N generates is bio-energetic, which is to say a naturally occurring harmless sound, similar to that produced by bats. The most commonly known ultrasonic equipment – used in hospitals for the safe scanning of pregnant women – uses a frequency 20 times higher than the uSonic 700N does.

To use the uSonic ultrasound, connect the bodypads (electrodes) with the device. These bodypads contain special transducers, which generate the ultrasound frequency.

Please pay attention to that accessory, because the bodypads are very sensitive (no pressure on all parts!).

Place the bodypads with the metallic plates on your skin. Choose a clean, hairless spot – it works best if attached to your temples, forearms, on the lumbar region of your back or on your hips (both hip bones). To get the best hold, fix the bodypads with a headband or sweatband or inside the waistband of your sweatpants or trousers. If necessary, use sticking-plaster.

The effectiveness of the energy flow via the bodypads is measured by the skin resistance, which is also an indicator of your state of relaxation. The lower the skin resistance, the better is the contact between the uSonic ultrasound and your body and the more efficient the application. The more dark filling in the bar on the display, the better.

5. Troubleshooting

A) The uSonic 700N does not play music (or other sounds):

– Check the volume of the uSonic 700N

– Check that you are not in pink noise mode

– Make sure that the earphones are plugged in properly

B) Though there is a memory card in the device,
   it appears the information „ No Card"

– Memory card did „block" or is not suitable (e.g. wrongly formatted cf. 2.4)

– A copy protected memory card doesn't run anymore, referring to the fact that the resume function was on play, which may lock the card as card „thinks somebody wants to harm the copy protection". Please send the memory card to Audivo – a simple envelope is enough. We send a replacement immediately.

C) The display stays black

– The battery is empty or hasn't enough power any more

– The contrast was set to low (cf. 3.3.7)

D) No bar on the display, not even the empty frame of the bar is shown.

– The plug of the bodypad isn't inserted right (not deep enough)

– The sensitive bodypads are damaged. Alternative bodypads can be buyed from Audivo.

– The uSonic mode was set to „OFF", that means deactivated (cf. 3.3.1/ C and 3.3)

E) Strong noise

– The intensity of the pink noise was increased. Reduce the sound volume

   – e.g. to Level 2 (cf. 3.2.3)

AUDIVO

6. Appendix

6.1 Safety instructions

Please note the instructions below:

6.1.1 uSonic 700N – Ultrasound Generator with Integrated Audio Player

The uSonic 700N is an electronic device. It is designed for operation in dry rooms.

Do not expose the uSonic 700N to any form of moisture. Do not use the uSonic 700N in the immediate vicinity of heaters or fires or in direct sunshine.

The uSonic 700N should under no circumstances be opened. The manufacturer accepts no liability for damage resulting from unauthorised tampering.

The player should be cleaned using a dry cloth only. No chemical cleaning agents should be used. Avoid static discharges in the immediate vicinity of the uSonic 700N.

6.1.2 Flash memory cards (MMC or SD cards)

The electrical contacts at the base of the card must not be forced.

The originator is responsible for the content and effect of the memory card. Audivo GmbH doesn't assume any liabilities for any damage, that result from content or improper use of the gear.

6.1.3 Electrical characteristics

The maximum voltage delivered to the bodypads is $\pm$ 10V and this is not harmful.

6.2 Items supplied

• AUDIVO uSonic 700N ultrasound generator with integrated audio player
• Flash memory card (optional)
• Battery charger with rechargeable batteries (Type AA)
• Bodypads (oscillators)
• Earphones (in ear)
• Belt pouch
• Belt clip
• Operator's Manual
• Information Brochure about „Easy concentration by Ultrasound"

6.3 Technical data

Memory	MultiMediaCard (MMC), Secure Digital Card (SD)
Internal memory	None
Firmware	Upgradeable/ new software via memory card editable
Display	Graphical Liquid Crystal Display (LCD) with backlight
Power supply	AA rechargeable Battery (normal batteries are improper)
Temperature range	+5 to +45 °C operating
Frequency response (audio)	20–20.000 Hz
THD	0,2 % at 1 kHz
Power	4,5 mW into 32 Ohm earphones
Size	90 x 65 x 20 mm
Weight	65 g (w/o battery)

Ultrasonic modulator

Ultrasonic frequency response: 30 kHz to 170 kHz

Ultrasonic mode "Relaxation" (Buddha): 44 kHz

Ultrasonic mode "Concentration" (Volcano): 88 kHz

Audio generator for pink noise(1/f-noise): 20 Hz to 20.000 Hz; variable; volume can be set independently

CE is given, see sign on Serial number sticker

6.4 Notes on Copyright

Intellectual property including the uSonic subliminal programs, music / sounds and operating instructions are subject to copyright laws.

6.5 Notes on Software

The menu language is only available in English at this time.

A Software update can be made via MMC / SD Card.

The software programs and the operating instructions may not be transmitted, altered or otherwise reproduced, either in whole or in part, in any form or using any

AUDIVO

means; furthermore, they may not be translated into another language, either naturally or by machine.

Valid only for steady state desk devices / Not for portable devices:

Reproduction of information contained in the operating manuals and software programs is by written permission of Audivo GmbH only.

The greatest care has been taken during the creation of all software programs and operating instructions, and they have been tested for accuracy in accordance with the current state of technology.

However Audivo GmbH accepts no liability either explicit or implicit, for the suitability of the programs or of the uSonic 700N for purposes other than those described in the operating instructions.

Audivo GmbH cannot be held responsible for damage resulting directly or indirectly from the use of the uSonic 700N or the software supplied with it or of the operating instructions, or for possible subsequent damage or for accidental damage except in cases of gross negligence or malfeasance.

Audivo GmbH can accept no liability arising from the loss of or damage to hardware or software or data resulting from direct or indirect errors or for costs arising in connection with the software supplied, the documentation or the uSonic 700N itself.

The information contained in this documentation and the software programs supplied are subject to change without special notice for the purposes of technical progress.

6.6 Warranty

We grant a warranty of 24 months on the uSonic 700N and the enclosed accessories. The warranty covers damages and deficiencies caused by faults of material or manufacturing. The warranty does not cover damage caused by misuse or unauthorised repair or other changes to the device.

Audivo GmbH cannot be held liable for damage caused by loss of profit.

6.7 Support

If you need any support for the uSonic 700N, please contact Audivo GmbH by email, telephone or mail:

E-Mail: support@uSonic.eu • Support-Hotline: +49 (94 35) 54 19-0

Mail to: Audivo GmbH • Irrenloher Damm 30 • 92521 Schwarzenfeld

AUDIVO

Audivo GmbH
Irrenloher Damm 30
92521 Schwarzenfeld
Germany

Support Hotline: +49 (94 35) 54 19-0

E-Mail: info@uSonic.eu

Technical support: support@uSonic.eu

www.uSonic.eu