voiceToYs

multisensory educational system



VoiceToys is an innovative, technologically advanced and educationally sound system of interactive devices that motivates children, including non-verbal children and children with multiple disabilities, to actively use voice and movement in therapy, follow tasks and respond to light, sound and vibration signals. Precise audiovisual and vibrotactile feedback, modularity and ease of use make it a valuable resource for special educators, speech therapists, occupational therapists and other professionals.

Prof. Neda Milošević Dedakin, PhD, Head of Speech Therapy, Faculty of Human Development, Serbia

The VoiceToys system is an innovative aid in working with children with developmental difficulties, and its use can facilitate the process of functional assessment as well as the treatment itself in several areas of development. The simplicity of this interactive platform with specifically designed devices enables a much more effective organisation of activities. I consider it one of the tools that are useful to have in a therapist's setting.

Assist. Prof. Selmir Hadžić, PhD, Bosnia and Herzegovina

Children have embraced VoiceToys as a novelty in assistive technology, and it enables teachers to bring creativity and innovation into their lessons. It also makes learning easier, as it lets us develop certain skills and concepts in children in a fun way. Through daily use of this set, we keep discovering opportunities to build on it with new games and teaching content.

For all these reasons, we recommend that you enhance your work with the VoiceToys set and see how easy it is to use.

Aleksandra Bukovica, Principal, "Miloje Pavlović" Primary School, Belgrade, Serbia

In my work with children with developmental and multiple disabilities, I use VoiceToys as an aid that motivates children to take an active part in therapy. With voice, movement or touch, the child triggers light, sound and vibration and gets immediate feedback. The system fits well with our approaches, from sensory stimulation to communication work. It is easy to use, and the professional adapts it to each child.

Goran Petrušev, MSc, President of the Union of Special Educators and Rehabilitators of North Macedonia

VoiceToys meant a lot to me in my work with children who did not vocalise spontaneously. When a child produced effects on the VoiceToys system with their own voice, it felt like magic!

Katarina Radaković, MA, teacher of the deaf, "Radivoj Popović" Primary School, Belgrade, Serbia

multisensory educational system

is designed for professionals working with preschool and school children and people with developmental difficulties.

It combines electronic devices, software and methodological guidelines, enabling wide use in education and other forms of developmental support.

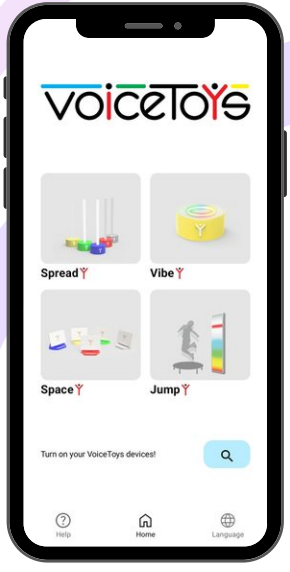
It is a powerful stimulating tool whose look and functions attract children's attention and let them discover and acquire knowledge and skills in different ways. Combining play and technology motivates children to take an active part and helps the educator lead and adapt activities.

The devices are wirelessly connected, easy to use and controlled via a mobile app operated only by the educator.

They are activated by voice or movement and respond with sound, light and tactile signals. They connect hearing, sight and touch in one activity, help children follow the task and turn every activity into an interactive game.

They offer a range of original, innovative games and functions that let the educator adapt and creatively enrich the content to suit the children's needs and lesson goals.

The **VoiceToys multisensory educational system** supports work on attention, speech, motor skills, cognition and social skills, making learning engaging and accessible.



Home screen of the mobile app

Developed with professionals, it is used in individual and group work with children in over 100 schools, kindergartens, special education and speech therapy practices and educational centres.


VOICETOYS

VoiceToys

JumpY

Interactive audiovisual panel with distance sensor



JumpY

is an audiovisual tool that detects sounds through its built-in microphone and movements through an additional wireless sensor. It displays them as light effects in different colours or uses them in various original sensorimotor games.

It offers several operating modes that the educator uses when working with a child on voice, speech and language, motor and social skills, spatial orientation, concentration and attention.



Operating modes of this device:

FEEDBACK – tracks and visually displays sound intensity or distance from the sensor (e.g. jumping on a trampoline). Depending on the input (microphone or sensor), it can be used for: establishing basic voice production, gaining control over voice intensity, practising rhythm and duration of the voice, work on attention and concentration, linking cause and effect, practising gross motor skills, balance, coordination and control of movement, rhythm, motor planning, etc.

REFLEX is an original game in which the device responds only to sounds with a sharp rise in intensity (clapping hands, hitting a drum with a stick, tapping a pencil on a table, etc.). It is designed to help children practise gross motor skills, attention, concentration, patience, the ability to delay a response and social skills. Children love playing it, so it is a good motivational tool for working with more physically active children.
The game automatically adapts to the player's performance, so it is equally engaging for different age and developmental groups.



JumpY with a trampoline

DIFFERENCES is an original game for identifying same and different colours. The device shows two fields of randomly generated colours, and the player's task is to respond depending on whether they are the same or different. The device gives an audiovisual signal for a correctly or incorrectly completed task.

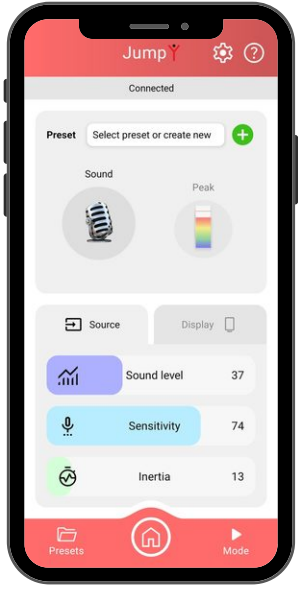
RHYTHM is a game in which the educator sets a rhythm that the device displays as lines, and the child or group of children has to repeat it. The device gives an audiovisual signal for a correctly or incorrectly completed task. The difficulty is set in the app.

SNOEZELEN is a mode of calm, slow light effects used for relaxation and calming down between activities.

PHONETICS is a function that visually shows the intensity of voice formants and sibilants.



JumpY in Reflex mode



JumpY controls

Technical data – panel

Power supply	DC, 5V, 2A
Connector type	USB-C
Dimensions	1200mm x 300mm
Wireless	Wi-Fi, Bluetooth
Material	Aluminium frame, Forex, extruded acrylic

Technical data – sensor

Power supply	DC, 5V, 2A
Connector type	USB-C
Dimensions	70 x 50 x 45mm
Battery	Li-ion, rechargeable
Wireless	Wi-Fi, Bluetooth
Material	PET-G


VOICETOYS

VoiceToys

SpaceY

Spatial auditory signalling system



VOICETOYS

SpaceY

is a system of 5 wireless smart speakers.

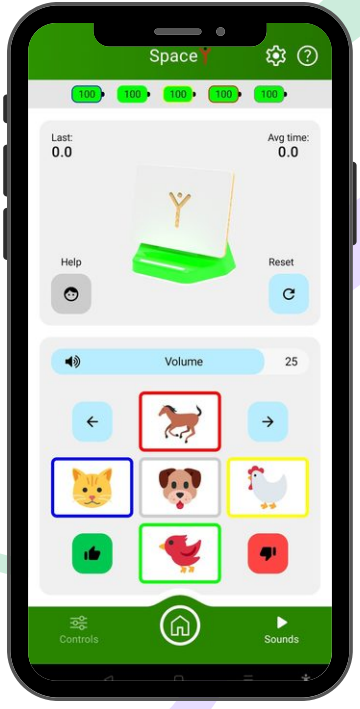
It is designed for practising sound identification and localisation of its source: determining position, direction and distance.



The SpaceY system has over 100 built-in sounds that are easily selected in the mobile app (animals, vehicles, household appliances, musical instruments, etc.).

The app makes it possible to change the location of the sound and provides audiovisual feedback for correct/incorrect identification, help with localisation, recording of results and battery monitoring.

The speakers are wireless and rechargeable, and can be placed anywhere in the room or hung on a wall.



SpaceY controls

SpaceY speakers are used in work on various auditory, speech and language, cognitive and social skills, in individual and group activities.

They are used for identifying and understanding sound patterns, and for sound localisation and lateralisation: determining the source of a sound and understanding its position in space, as well as recognising auditory information against background noise (practising identification and discrimination of individual sounds in the presence of competing sound stimuli).



Technical data

Power supply	DC, 5V, 2A
Connector type	USB-C
Dimensions	120 x 73 x 107mm
Battery	Li-ion, rechargeable
Wireless	Wi-Fi, Bluetooth
Material	PET-G, balsa, EVA foam, extruded acrylic



voicetoys



VOICETOYS

SpreadY

Spatial visual signalling system



SpreadY

is a system of 5 wireless light columns with multiple capabilities and uses.

It offers three operating modes that the professional uses when working with a child on voice, speech and language, motor and social skills, spatial orientation, memory, concentration, attention and basic cognitive and mathematical abilities.



Operating modes of this device:

SOUND MODE

Upon detecting sound, the columns visually display its intensity and spread in space. The lights switch on and off so that columns closer to the speaker are activated more easily and those further away with more effort, clearly showing how far the voice carries.

One can use this mode for work on voice placement, vocalisation, control of voice intensity, rhythm and duration, recognising and changing unwanted vocal habits (such as screaming and making overly loud sounds during play), vocal endurance, as well as attention and concentration.



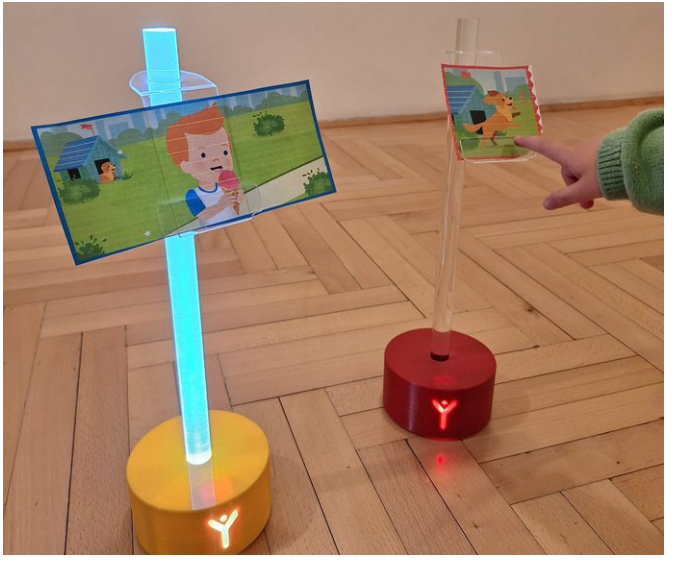
SpreadY in Sound mode

MEMORY

Using parameters previously set in the app, the system generates sequences of randomly selected numbers from 1 to 5 and displays them by lighting up the columns. The task can be memorising sequences or adding up the lit lights. In this way, memory, mathematical operations, attention, concentration, etc. are practised through play.

MANUAL

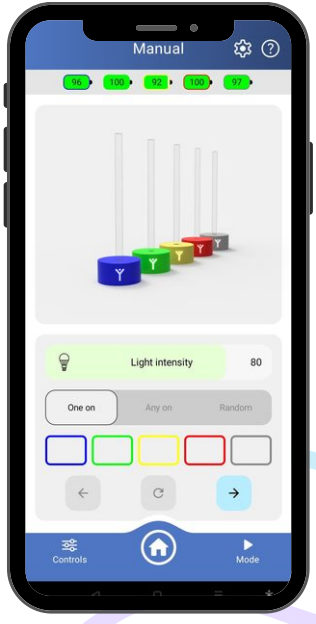
Using the app, the professional turns on the column lights according to the exercises they want to use with the child. It is suitable for analysis and synthesis of words and sentences, and for work on phonological awareness, thinking, categorisation, movement coordination, etc.



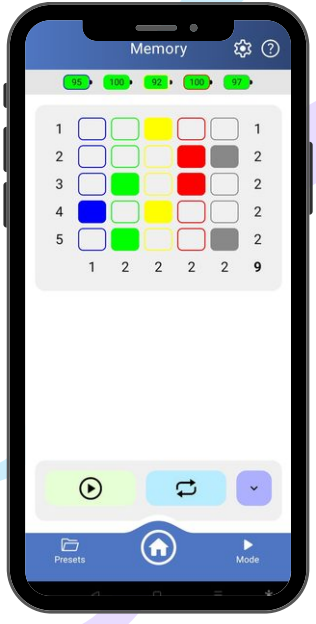
Picture story – Manual mode

Technical data

Power supply	DC, 5V, 2A
Connector type	USB-C
Dimensions	Diameter 121mm Height 340mm
Battery	Li-ion, rechargeable
Wireless	Wi-Fi, Bluetooth
Material	PET-G Acrylic rod



SpreadY – Manual mode



SpreadY – Memory



VoiceToys

VibeY

Vibrotactile light-up device



VoiceToys

VibeY

is a device that gives real-time audiovisual and vibrotactile feedback. It responds to the pitch and intensity of sound with gentle light signals in different colours and mild to moderate vibrations.

In practice, professionals use it as a powerful motivational tool in work with non-verbal children and with first vocalisations.



VibeY is suitable for work on attention, concentration, visual perception, thinking, social skills, breathing rhythm and perceiving auditory information through other sensory channels, sight and touch, in multisensory activities.

VibeY can also be used in combination with flash cards and other teaching aids, which broadens its range of uses.

Intensity of the device's response and its response delay can be adjusted in the mobile app.

The educator uses the delayed-response effect in exercises on speech tempo and rhythm.



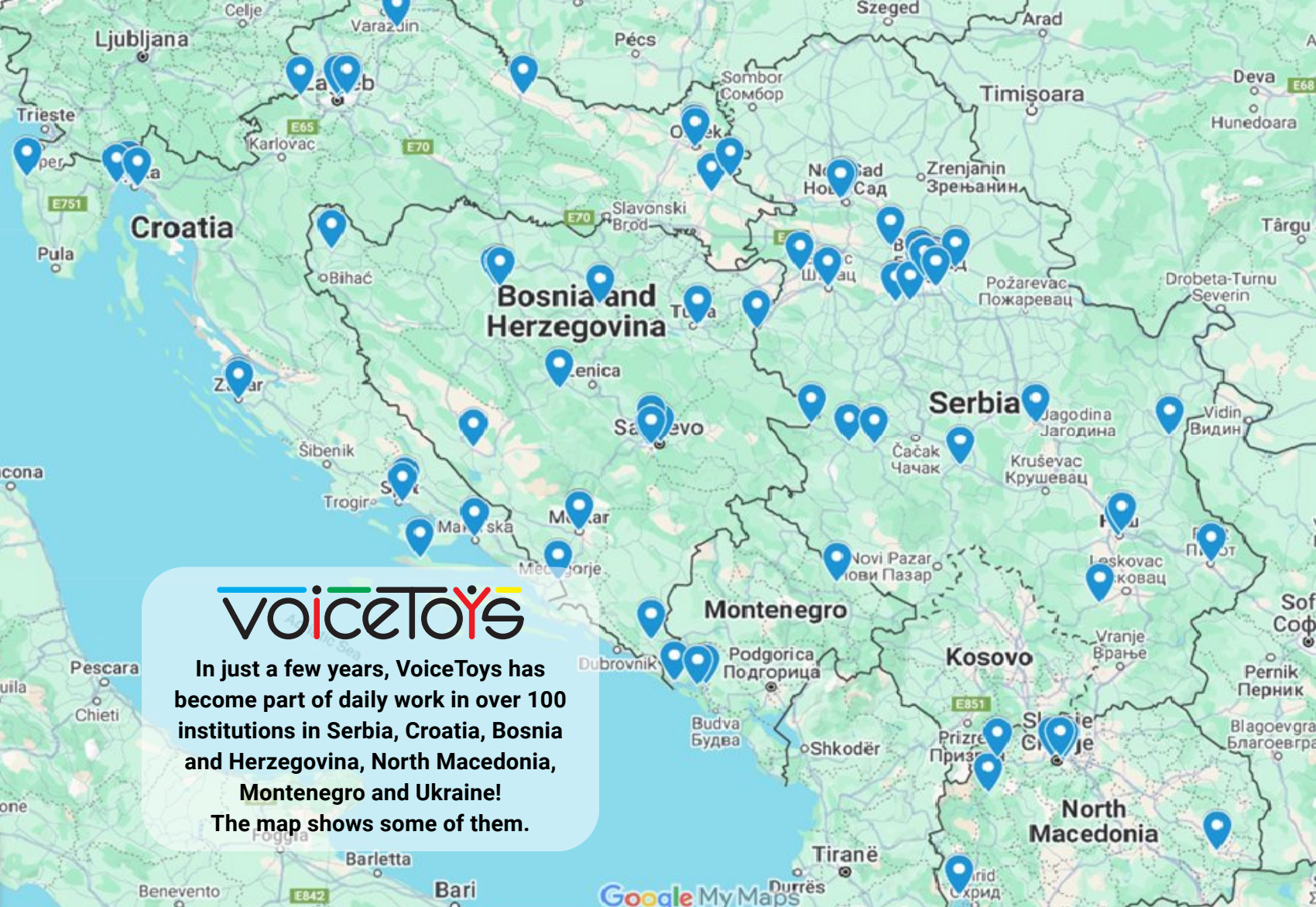
VibeY with flash cards

voicetoys

Technical data

Power supply	DC, 5V, 2A
Connector type	USB-C
Dimensions	Diameter 121mm Height 60mm
Battery	Li-ion, rechargeable
Wireless	Wi-Fi, Bluetooth
Material	PET-G Extruded acrylic




VoiceToys
In just a few years, VoiceToys has become part of daily work in over 100 institutions in Serbia, Croatia, Bosnia and Herzegovina, North Macedonia, Montenegro and Ukraine!
The map shows some of them.
Croatia
Bosnia and Herzegovina
Serbia
Montenegro
Kosovo
North Macedonia
Ljubljana
Trieste
Pula
Karlovac
Bihać
Slavonski Brod
Sombor
Сомбор
Pécs
Szeged
Arad
Timişoara
Deva
Hunedoara
Zrenjanin
Зрењанин
Požarevac
Пожаревац
Drobeta-Turnu Severin
Târgu
Jagodina
Јагодина
Čačak
Чачак
Kruševac
Крушевац
Vidin
Видин
Leskovac
Лесковац
Novi Pazar
Нови Пазар
Šibenik
Trogir
Dubrovnik
Podgorica
Подгорица
Budva
Будва
Shkodër
Prizren
Призрен
Vranje
Врање
Pernik
Перник
Tiranë
Durrës
Barletta
Bari
Pescara
Chieti
Benevento
Foggia
Google My Maps

VoiceToys

multisensory educational system

Manufacturer:
VoiceToys D.O.O. Beograd
Science Technology Park
Veljka Dugoševića 54
Belgrade, Serbia
voicetoys.rs@gmail.com
+381 65 276 1635
www.voicetoys.rs

Website

Documentation

CE



Intended use: VoiceToys is not a medical device under medical device regulations and is not intended for diagnosing, treating, alleviating or monitoring diseases, injuries or disabilities. It is an electronic multisensory stimulation system for professionals, used as an aid in special education, speech therapy, rehabilitation and education. Assessment, choice of approach and interpretation of progress rest solely with a qualified professional. The manufacturer does not guarantee any therapeutic outcomes.