

Brain-Boy®
Main Manual



Medi  **TECH**
Electronic GmbH



Product Overview

The proven concept behind the *Brain-Boy*® is to test and train the complicated elements of brainwork playfully. These instructions shall help you to use the device just as playfully.

1.2 Product Overview

The following graphic shows all elements of the *Brain-Boy*® you need to play with it. Take your device into your hand and compare the elements.



The three buttons are used to operate a menu which offers you eight different games.

EC - Declaration of Conformity



MediTECH Electronic GmbH

(Issuer's name)

Langer Acker 7, 30900 Wedemark

(Issuer's address)

The designated product

***Brain-Boy*® (Article-Number: 2222 / 2226 / 2228)**

made in Germany

(Product's name, Article-Number)

is in conformity with the Europeans Directive 93-42-EEC. The technical documentation as submitted and full compliance with the standards listed below proves the conformity with the essential requirements of the above-mentioned EC Directive:

DIN EN 60601-1:2007, DIN EN 60601-1-2:2007

DIN EN 60601-1-4:2001, DIN EN 60601-6:2008

The VDE Testind and Certification Institute has tested and certified the product grantin the VDE Licence for the mark(s) as displayed. (Licence-Nr. 119927)

Wedemark, February 2008

(Place, Date)

(Legally bindeing signature of the issuer)

6.2 Device and Service Warranty

By purchasing the *Brain-Boy*® from

MediTECH Electronic GmbH - Wedemark

you have a full warranty period of 24 months from the purchasing date (batteries and any damage due to misuse excluded).

Supplementary, we offer you a hotline service for the whole period while working with our device.

This service includes:

Indications for the use of the *Brain-Boy*® with different groups of persons

Help with possible user problems / malfunctions

Answers to questions about and around the *Brain-Boy*®

You can contact the telephone hotline under

0049 51 30 9 77 78-0

Of course you may send us your questions as well:

via **fax:** **0049 51 30 9 77 78-22**

via **Email:** **service@meditech.de**

* Except of disturbance of function or damages caused by improper use.

1.3 Safety Instructions

The *Brain-Boy*® helps to train and test different elements of processing and perception of the human brain.

Each use which does not serve this purpose is not intended and therefore not permitted!

With appropriate installation, correct usage according to the instructions and maintenance advice, safety or health of the user or third parties is not endangered. For this reason, this active medical product can be brought into circulation and be used for short time.

Attention:

Do not use the *Brain-Boy*® inside rooms where you may find the following materials:

- inflammable gas mixtures combined with anesthesia and air
- inflammable gas mixtures combined with anesthesia and oxygen or laughing gas.

These materials could catch fire.

Attention:

Use the device exclusively with provided *MediTECH*-headphone, MT-HS 16.

The applied special design ensures the legal requirements for minimal electric distance. It prevents potentially dangerous currents from passing over to the ear.

Attention:

Protect the device and the batteries against ultrasonic baths, significant humidity and chemical detergents. The device could be destroyed.

Attention:

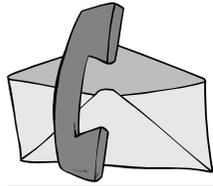
Do not open the appliance on your own!
Do not repair defects on your own!
The device could be damaged permanently!

Attention:

Protect the *Brain-Boy*® against rough shocks.
The device could be damaged!



Safety Instructions



Contact



Safety Instructions

- Attention:**
Store or transport the *Brain-Boy*® only in the original packaging in which it has been delivered.
Thus the equipment is sufficiently secured against vibrations during a transport.
- Attention:**
The battery compartment should not to be opened by children!
If the wires are torn out, the device could be damaged!
- Attention:**
Clear the *Brain-Boy*® before the first use.
Follow the instructions in chapter 5.3.
- Attention:**
With too intensive training, a light headache or feeling of dizziness may occur.
These symptoms will disappear as soon as you choose a lower difficulty level or interrupt the training temporarily.
- Attention:**
For medical reasons the color red is necessary for the light emitting diodes (LED) for playing with the *Brain-Boy*® (even if according to DIN EN 60601-1 paragraph 7.9, this color is designated only to show danger or the necessity of urgent action). The *Brain-Boy*® does not contain any dangerous situation, which would have to be indicated in this way.
- Attention:**
We do not take any liability for damages caused by inappropriate use or breach of the safety indications.

6. Service

In our company, customer contact and service is very important. It goes without saying that we are open for your questions and ideas concerning working with our products and their use.

6.1 Contact

You may contact us in different ways:

MedTECH Electronic GmbH

-Customer Service-

Langer Acker 7

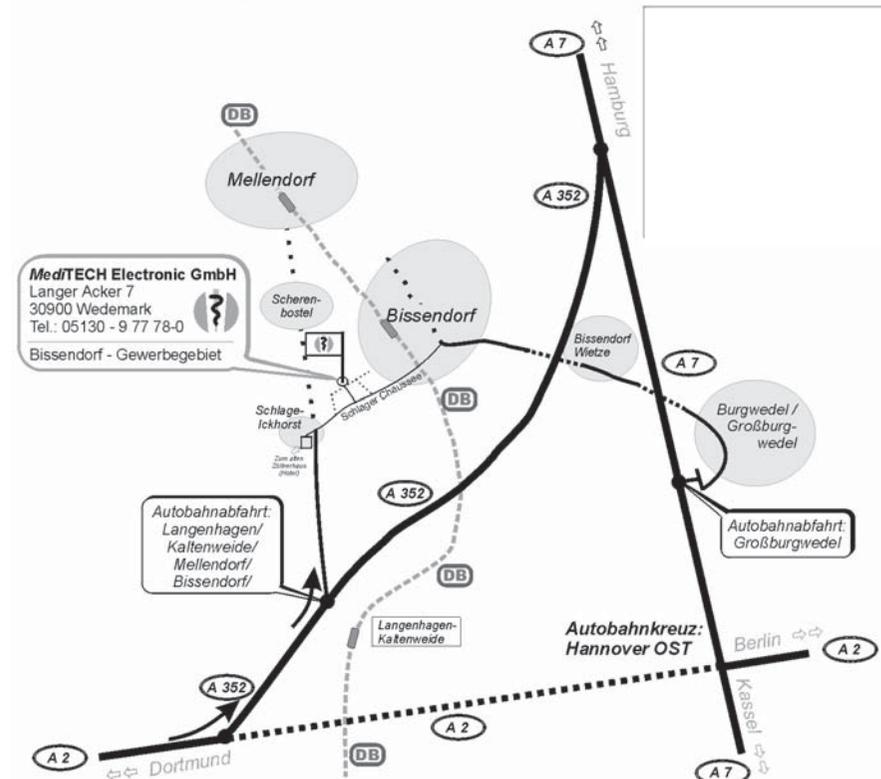
D-30900 Wedemark (Germany)

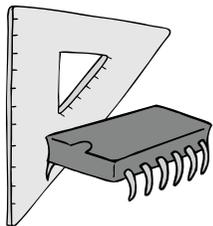
Telefon: 0049 51 30 9 77 78-0

Fax: 0049 5130 9 77 78-22

Email: service@meditech.de

PLEASE CHECK
www.meditech.de
OUR WEBSITE





Technique

5.7 Model identification plate

At the back of the *Brain-Boy*® the following model identification plate is placed. The details and signs have the following meaning:

model

producer

serial number

appliance part

Attention, read the instructions!

Enviromental-disposal-classification

year of production



This sign means, that you need an additional part to use the *Brain-Boy*®. In this case it is the headphone **MT-HS-16 II** which is part of the delivery scope.

Have a look at the special plate.

1.4 General Training Information

The principal item of the *Brain-Boy*® is the menu with six independent games:

In each game you will hear clicks or tones over a headphone and/or see the flash of the LEDs. You have to react differently to these stimuli. Your answers will give information about:

- the temporal interval between stimuli which you recognize
- the pitch interval between tones you can distinguish
- time sequences which you can follow

Recommendations:

During the first three to four weeks the trainer should press the corresponding buttons for the trainee. This ensures that the trainee is not distracted by the additional task of entering his/her answers into the device. The two functions "Sync-Boy" and "SpeedBoy" cannot be handled in this way as they measure motorical capabilities of the individual trainee.

You can slow down the *Brain-Boy*®. Press the buttons for a longer time. The next items will be provided not before you release the buttons again. This helps to make the training much stressless and calm.

If you are interested in further information about central perception the following books will allow you an extensive overview.

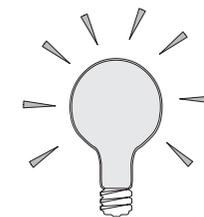
- 📖 "Was Hänschen nicht hört..." (GERMAN) by Fred Warnke
- 📖 "Der Takt des Gehirns" (GERMAN) by Fred Warnke

These books can normally be bought at your local book store as well as directly at *MediTECH* Electronic GmbH. In addition to specialized literature, *MediTECH* offers a two-day-seminar for beginners and a follow-up workshop with the aim to achieve practical knowledge of how to use the devices and methods.

1.5 Supplied Accessories

The scope of delivery contains:

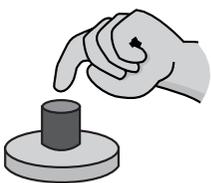
- *Brain-Boy*® with 9V battery.
- *MediTECH*-headphones MT-HS-16-II - suitable for training
- 👉 **Attention:** The *Brain-Boy*® is only to be used with the delivered MT-headphone or an identically constructed ones, supplied by *MediTECH*.
- Main Manual



In general

Recommended strategy:

1. Train combined with auditory and visual stimuli (left headphone socket)
 2. Continue with a plain auditory reinforcement run (right headphone socket)
- Handle each training function correspondingly, possibly on a daily basis.



Start

2. Getting started

In this chapter we will explain the steps you should carry out and pay attention to before you begin to play.

Switch on ⇒ Choose ⇒ Go!

This general process is valid for any of the games.

1. Switch the device on.
2. Choose a game and decide upon the difficulty level.
3. Start the Game.

To train, you should always be concentrated and relaxed. Make sure that you can practice in a quiet room, where background noises can be avoided. When using the headphones, make sure you put them on correspondingly to the description of the headphone. The side with the sticker has to be on your left ear.



When looking at the light signs while playing, please look at the circle above the start button.



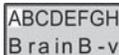
2.1 Program start

Press the start Button in the middle of the device and hold it for about 3 seconds.



The display shows the following:

This is how you start the program. If you let go of the button, you already "are" in the game selection area. The display shows the following:



Suggestion: In order to get acquainted with the device, we recommend to only use the *Brain-Boy*® as described on the following pages.

In a submenu you can adjust individual settings, ie. Volume, verbal instructions and commendments (on/off), personal greeting of the trainee.

If you wish to adjust these settings, please continue in chapter 4. There you can learn about the corresponding steps. To keep usage of the *Brain-Boy*® extremely simple, there are no further comments on these extensive additional options.

5.6 Technical details

| | |
|--------------------------------|--|
| tension voltage | 9 V-battery or rechargeable |
| running | 30 mA |
| output level | < 110 dB(A) directly at the headphones |
| output signal | 312 - 600 Hz, variable length |
| ISI (Inter-Stimulus-Intervall) | 18 µs - 999 ms, var. steps |
| frequency difference | 1 ... 80 %, variable steps |
| weight | 150 g (incl. battery) |

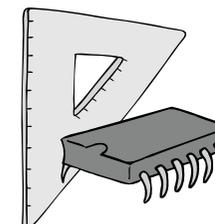
| Usage | |
|---------------------------|-----------------|
| temperatur of surrounding | +10 °C - +40 °C |
| rel. atmospheric humidity | 30% - 75% |
| air pressure | 700 - 1060 hPa |

| Storage and transport | |
|---------------------------|-------------------|
| temperatur of surrounding | -20 °C bis +50 °C |
| rel. atmospheric humidity | 20 % bis 95 % |
| air pressure | 700 - 1060 hPa |

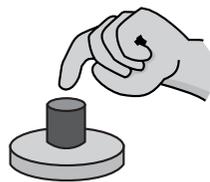
| Light emitting diodes | |
|--|--------------------------------------|
| case | 2,5 mm rectangular |
| colour | red / green |
| wavelength | 555 nm - 660 nm |
| radiate angle | 60° bis 80° |
| tension voltage (at a temperatur of 25 °C) | 1,90 V / 2,20 V |
| maximal voltage (at a temperatur of 25 °C) | 2,50 V / 2,80 V |
| light intensity | min. 14 mcd at I _F =20 mA |
| I _{F(max)} | 30 mA |
| reaction time (at a temperatur of 25 °C) | 20 ns |
| temperature during usage | -30 °C - +85 °C |
| temperature during storage | -40 °C - +85 °C |

MedITECH-head phones MT-HS-16

| | |
|-----------|--------------------------|
| impedance | 32 Ohm |
| response | 20 - 20.000 Hz |
| power | max 100 mW |
| lead | 2 m shielded |
| plug | 3,5 mm stereo phone jack |
| weight | 63 g |



Technical Details



Sequence

2.2 End of the Program

In order to keep the *Brain-Boy*® as simple as possible, we decided to do without an off-button. Instead, the device switches itself off automatically, therefore you do not have to do anything:

- If you do not press a button for about 10 seconds, the program will show the number 20: this number will be counted backwards to 1 before the device switches itself off.



- If you press a button within the 20 seconds, the program continues normally.

As you see, you will have enough time for your answer. You do not have to get nervous if the numbers appear suddenly in the display.

Hint: Read the instructions for a game completely and follow them step by step. This way you will get an extensive overview about the game and can concentrate on the game and the stimuli.

2.3 Program Sequence

You will find an overview of the control program on the folded rear cover page. As the program is exactly explained on the following pages, you can use this overview for orientation. Simply open the back of the cover and compare the already described parts:

- The first column shows all the games in a certain order. You can choose them with the gray buttons.

The second column shows how many difficulty levels are available for each game. The numbers tell the starting value for the task. A low difficulty level means an easy starting value for the task. You choose these as well with the gray buttons. It will be shown which part of the program you are currently in by giving a small overview on the following pages at the side.

- In addition, the possible difficulty levels and the possible start value are shown on the right sides of the game descriptions.

5.3 Cleaning

Clean the *Brain-Boy*® casing after usage with a off-the-shelf mild disinfection cloth.

Attention: Be aware of the usage and security recommendation provided by the cloth manufacturer. Improperly applying the cloth may lead to health risks or damage of the device.

Attention: Protect the device from ultrasound baths, running water and chemical cleansers (i.e. concentration and alcohol). The device could be damaged otherwise.

Note: The cushions on the headphones need to be replaced regularly (at least every six weeks). This prevents a growing pollution and toxicity.

The foam material parts of the headphone have to be replaced when the user changes. Cleaning the foam material is not envisaged. You can purchase the upholstery in a specialised shop or at the *MediTECH* (product number 8333).

5.4 Storage

After 30 seconds of non usage, the *Brain-Boy*® completes an automatic shutdown.

- Store your device in a dry and closed-off room at typical room temperature. You can place it in a permanent wall attachment which you may purchase from *MediTECH* (part number 9060)
- For longer periods of storage or transportation use the original packaging the *Brain-Boy* comes with.

5.5 Sewage and Refuse Disposal

The *Brain-Boy*® and its components are categorized as small battery-run electronic devices.

- Remove the battery from the battery department and dispose of it in the next available collection site (usually provided by your regional administration)
- As available domestically: Return your *Brain-Boy*® and the corresponding headphones to your local waste disposal. Category: Small electronic devices
- The package of this device to 100 percent consists of cardboard; therefore it can be disposed of as paper waste.

If you do not wish to simply dispose of the *Brain-Boy*®, we will be more than happy to receive it back from you. We will dispose your unit in a sound and environment fashion.



Technique

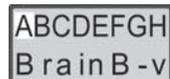


Desired Game Choice

2.4 Desired Game Choice

To choose a game, the *Brain-Boy*® has to be switched on.

1. Press the start button in the center of the device. Like this, you can start selecting the desired game. You can see the following in the display:



Each letter in the top line of the display stands for a different game. The blinking frame shows the actual choice. The lower line shows the name of the chosen game, in this case it is **Brain-Boy**.

If the headphones are plugged in and you have put them on, the names of the games will be announced for you.

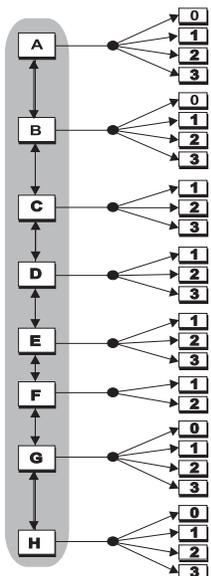
Would you like to start at once?

2. Press the start button and continue with the next chapter (difficulty level).

Or would you like to try another game?

1. Mark a different game with the buttons on the left or on the right: (Have a look at the table)
 - Press the button **L**. The blinking frame goes one position to the **left**.
 - Press the button **R**. The blinking frame goes one place to the **right**.
2. Press the the buttons L / R as often as needed until you have marked the desired game.
3. Press the start button. Like this you choose the game and can now fix the difficulty level. (Look at the following chapter difficulty level)

| Letter | Game |
|--------|----------|
| A | BrainB-v |
| B | BrainB-a |
| C | ClickBoy |
| D | SoundBoy |
| E | Sync-Boy |
| F | SpeedBoy |
| G | TriplBoy |
| H | Long-Boy |



General hint: Hold the *Brain-Boy*® in such a way, that you can use the buttons L / R with two fingers. This will make operation easier.

5.2 Battery Change

The *Brain-Boy*® is delivered with an inserted and connected battery. This has to be changed after a few month of daily practice if:

- the volume of the clicks and the text is softer
 - the details on the display are more difficult to see
- You need a leak proof 9 V battery which you can purchase in any electronic department of a store.

The battery case is at the back of the case.

1. Turn the device so that you can well reach the back side. Look out that the connecting sockets of the headphone do not point toward your body.
2. Open the lock of the lid. Pull the slide into your direction.
3. Remove the lid. You can now see the battery.
4. Carefully take the battery out of the battery case.

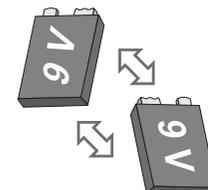
Attention: Do not tear at the wires.

You may damage the device.

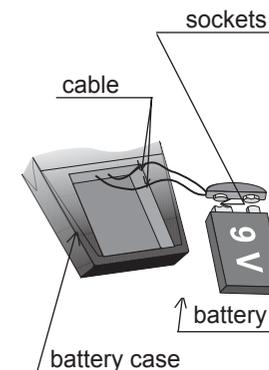
5. Unbutton the old battery of the connections.
6. Button the new battery onto the connection. Pay attention that the connections are inserted firmly.
7. Put the battery carefully into the battery case.

Attention: Pay attention that the wires are completely inside the battery case. They must not loom about the rand, otherwise, they could be jamed.

8. Put the lid onto the battery chamber.
9. Shove the slide away from you. Doing so you close the case.



Battery Change





5. Maintenance and Technique

In this chapter you will learn how to deal with possible difficulties with the device.

5.1 Trouble Shooting

| Problem | Check this |
|--|--|
| You cannot hear the sounds at all or only at one side . | <i>The headphone might not be connected correctly.</i> Check if the headphones plug has been inserted firmly. <i>The headphone might be defective.</i> Please contact us because you are only allowed to replace the headphone by an approved one. |
| The stimuli and the text are weaker to hear than usual. The display is only showing weakly . | <i>The battery might be empty.</i> Change these by following the instructions in the chapter battery change. <i>This maintenance work must not be done by children!</i> |
| The device switches itself off automatically and shows the top value. | You made three mistakes during the last seven stimuli. This performance is intended to get a reliable test result. |
| Apparently you pressed the right button . But nevertheless no praise is given and the tasks get easier (higher values) | The headphone might be used the wrong way round. Turn it as described and continue the game. The side with the sticker has to be on your left ear. |
| During the game, the current values do not appear on the display; no praises are displayed or presented in the headphones. | These functions (some or all) were turned off. Simply turn them back on as needed (see pages 32/33 for reference). |
| Only game functions BrainB-v, BrainB-a and SoundBoy are available. | You own a Brain-Boy Classic version. You may upgrade your device to a Universal version. Please contact MediTECH support for details. |

Are there other mistakes or problems while playing?
Contact our customer hotline

+49 - 5130 - 9 77 78-0.



We can discuss further steps together!

2.5 Difficulty Level

Before you can choose the difficulty level of a game, you have to choose the specific game. For that, follow the steps in the previous chapter: Selecting the desired game.



After having chosen a game, in this example Brain-Boy, the display shows the following.

The top line of the display shows the name of the chosen game, the lower line shows the possible difficulty levels. The BrainBoy, for example has four.

Here as well, the blinking frame shows the marked choice. The single difficulty levels have different meanings (have a look at the table):

- Choose left or right with the buttons L / R.
 - Press the button **L**.
The blinking frame goes one place to the **left**.
 - Press the button **R**. The blinking frame goes one place to the **right**.

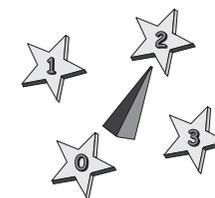
| Digit | Meaning |
|-------|------------|
| 0 | very easy |
| 1 | simple |
| 2 | difficult |
| 3 | very heavy |

Which difficulty level stands for which starting level, you can see on the table at the back of the cover.

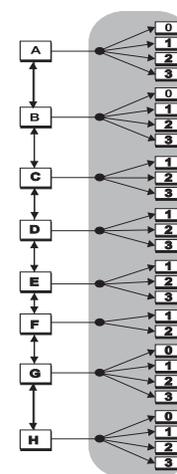
- Hint:** If you are trying a game for the first time, you should start with a lower difficulty level. The tasks within by the games will become more difficult automatically, if you give the right answer.
- Press the the buttons L / R as often as many times as needed, until you have selected the desired level.
 - Now press the start button to confirm your choice and start the game. The first set of stimuli starts after a three second countdown once you released the button - so please be attentive.

3. Games

On the following pages you will find specific descriptions to learn how to practice with the different functions of the *Brain-Boy*®!



Difficulty Level





BrainB-v

3.1 BrainB-v – Game

While playing with the BrainB-v, you test and train the tact frequency of your brain at seeing (i.e. its processing speed) - the so called order threshold. It indicates the time measure of the ability to distinguish signals with only a brief pause interval and to put them in order. This ability is very important for digesting written information.

- auditory order threshold: You hear two short clicks.
- visual order threshold: You see two short light signals.
- auditory and visual order threshold: You hear and see both kinds of sensual stimuli.

What is your training goal?

The long-term goal is to increase the speed of the brain's capability to digest and process information.

How do you practice?

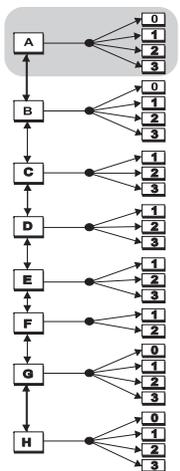
- Put the plug of the headphones tightly into the following connecting socket.
 - visual training (with auditory help): left socket
 - visual testing: no headphones
- For training put on the headphones corresponding to the description on the headphones. The headphone side with the sticker has to be on your left ear.
- Start the game BrainBoy. Follow the instructions on page 10 and 11.
- Exactly pay attention to the clicks and/or light signals – the order is important! You have 30 seconds time to give the answer. You may calmly decide at which side you perceived the first stimulus.
- Press one of the the buttons L / R depending, on which signal came first.



Recommended strategy:

- Train combined with auditory and visual stimuli (left headphone socket)
- Continue with a plain visual reinforcement run (no headphones)

Handle each training function correspondingly, possibly on a daily basis.



Functions B through E: (identical usage)

Here you can choose to turn the function <on> or <off>.

- Press L or R to toggle between <on> and <off>.

Funktion F: Name

Here you have the following options to choose from (see table file):

| Letter | Option |
|--------|--------|
| A | show |
| B | new |
| C | end |

Press L or R to mark-up the desired option, then press Start to select it.

Option A: show

- Proceed as described for functions B through E (see above).

Option B: new

Suggestion: Please be attentive when entering the name. You can only scan through the alphabet from A to Z repetitively – however you cannot scroll backwards.

- Press the R button until you see the desired letter on the display
- Press Start to select the desired letter.
- Continue to „write“ the name by pressing the R button as needed and confirm each selection by pressing start.
- Press L if you chose the wrong letter. By doing so you can delete your latest entry.

You wish to exit the name entry option?

- Press Start 2 times quickly after another.

Note: If you enter a new name, this has now effect on the previously recorded training data.

Option C: end (of submenu)

Press start to return to the settings menu

Function G: end

Press Start to return to the main menu.

Functions:

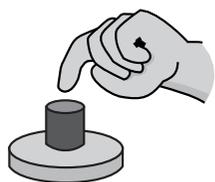
- voice
- praise
- OK-LED
- ISI

Function:

- name

Function:

- end



Settings

4. Individual settings

In this chapter you find explanations on the individual settings you can define for your *Brain-Boy*®:

| Letter | Function | Meaning |
|--------|----------|---|
| A | volume | Change signal volume (left/right). |
| B | voice | Turning verbal announcements for games and praises on/of (no voice when defined „off“) |
| C | praise | Visual praises on correct answers (not displayed when defined „off“) |
| D | OK-LED | light confirming correct answers (not light when defined „off“) |
| E | ISI | inter stimulus interval can be read from the display (not displayed during the run when defined „off“) |
| F | name | Client can enter his first name (to be displayed upon starting the device. (if turned off, „Enjoy Playing“ will be shown during start.) |
| G | end | Command to exit the settings menu |

1. Press the Start button and additionally the L button in the main menu; the display changes to: **ABCDEFGG volume**
2. You are now in the settings menu. Now release both buttons.
3. Press L or R as necessary to mark-up the desired function (see table file)
4. Press Start. This selects the marked-up function and provides you with the corresponding options.

Function A: volume

1. Press Start and put on the headphones correctly. You will hear a beeping sound on the left.
2. Adjust the volume as necessary.
 - Press R to increase the volume.
 - Press L to reduce the volume.
 - Press Start to confirm the settings you defined.
3. Repeat the same process for the right ear.

If the volume settings exceed the norm volume, a warning will show on the display. Press Start to acknowledge this warning. This is to protect you from accidentally being exposed to overly loud volumes.

Function:
• volume



Did you see the first light at the **left side**? Then press the button **L**.

Did you see the first light at the **right side**? Then press the button **R**.



BrainB-v

If you answer correctly, the device will praise you and increase the difficulty level for the next pair of stimuli. The two stimuli will follow each other more quickly each time, so please pay attention!

30 ms
Great

If your answer was incorrect, you can try again on a lower difficulty level. The stimuli will follow each other more slowly.

In the topline the display the order threshold value you have reached is shown, then it changes to the next value. And you already see and/or hear the pair of stimuli.

End of Training

a. Early Program Termination

You may terminate the training any time and return to the next menu step.

- Keep the start button pressed for at least one second. This will interrupt the training and return you to the main menu. Prior to that your achieved score will be shown as your “endscore”.

b. Automatic Program Termination

If you make three mistakes in a sequence of seven pairs of stimuli, the device terminates the program on its own. The display will show the accomplished value before the first wrong answer as the top value.

- Write this result into a copy of the result table on page 42. Compare your results to the table file on page 28.

Furthermore, the device finishes the game automatically if: You fall short of 5 ms or exceed 800 ms. That is when you have reached one of the program boundaries The display shows the the words endvalue or topscore. After 30 seconds the game selection becomes available again. You can speed up returning to the main menu by pressing the start button.

Startvalue of level

| level | standard version | slow version |
|-------|------------------|--------------|
| 0 | 400 ms | 800 ms |
| 1 | 200 ms | 400 ms |
| 2 | 100 ms | 200 ms |
| 3 | 50 ms | 100 ms |



BrainB-a

3.2 BrainB-a – Game

While playing the BrainB-a you test and train the tact frequency of your brain at hearing (i.e. its processing speed) - the so called order threshold. It indicates the time measure of the ability to distinguish signals with only a brief pause interval and to put them in order. This ability is very important for spoken language information.

During the training you will perceive different stimuli:
 -auditory order threshold: You hear two short clicks.
 -auditory and visual order threshold: You hear and see both kinds of sensual stimuli.

What is your training goal?

The long-term goal is to increase the speed of the brain's capability to digest and process information.

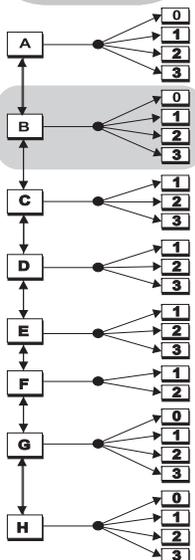
How do you practice?

- Put the plug of the headphones tightly into one of the two connecting sockets.
 - auditory training (with visual help): left socket
 - auditory testing: right socket
- For test and training put on the headphones corresponding to the description on the headphones. The headphone side with the sticker has to be on your left ear.
- Start the game BrainBoy. Follow the instructions on page 10 and 11.
- Exactly pay attention to the clicks and/or light signals – the order is important! You have 30 seconds time to give the answer. You may calmly decide at which side you perceived the first stimulus.
- Press one of the the buttons L / R depending, on which signal came first.



Recommended strategy:

- Train combined with auditory and visual stimuli (left headphone socket)
 - Continue with a plain auditory reinforcement run (right headphone socket)
- Handle each training function correspondingly, possibly on a daily basis.



Function D: progress

You are reviewing the stored data for the BrainB-v function.

Reviewing the development for this game function?

- Press Start. You will see the score for this game during the last reinforcement run.
- Press L and R until you have reviewed all data you were interested in.
- Press Start. This will take you back to the regular main menu.

View the development of another game function?

- Press L or R (as often as necessary) to choose a different game function.
- Continue with the previously described steps.

Delete previous results (Reset option)

- Press L or R until the Reset option is selected. To proceed, read on at "General information on the reset function".

Exit submenu?

- Press L or R until you see the END command in the display. Now press start to exit the submenu and return to the main menu.

Function E: ResetAll

Please continue by reading on at "General information on the reset function"

Function F: Ende

Press Start to exit the evaluation menu.

General information on the reset function

When you see the reset option in the display, proceed as follows:

If you do NOT wish to delete all recorded values:

⇒ Press the L or R button to pass this option.

If you DO wish to permanently delete all recorded values

⇒ Press the start button.

In the display you see:

resetAll
yes no

- Press L. This deletes all stored data.
- Press R. This terminates the process and you return to the previous menu. No data is deleted.



Evaluation menu

Function:
 • progress

Function:
 • ResetAll

Function:
 • end



Evaluation menu

3.10 Evaluation menu

The *Brain-Boy*® comes with a special menu for evaluation (data logging). This should not be mentioned to the individual clients using the device so that they do not overly feel controlled and do not erase the obtained data.

Within the evaluation menu, all data is stored per game function. The obtained data can be reviewed with the following menu options:

| Letter | Function | Meaning |
|--------|----------|--|
| A | topscore | ... out of the last 20 reinforcement runs |
| B | latest | ... score achieved in the reinforcement mode |
| C | how many | ... did the client use the training or the reinforcement |
| D | progress | Results from the last 20 reinforcement runs |
| E | resetAll | Delete all collected data |
| F | end | Leave the evaluation menu |

1. Within the main menu (game selection), press the start button and additionally keep the R button pressed for approximately 5 seconds (until the following information appears in the display):



You are within the evaluation menu. Please release both buttons now.

1. Press the buttons L / R to choose the desired function.
2. Press the start button. You will select the function and reach its content.

Functions A through C: (identical usage)

These functions are handled identically.

You are reviewing the stored data for the BrainB-v function. If there is nothing but a horizontal bar, no sessions using the reinforcement mode were conducted / stored.

- Access the stored data for the other seven game functions by pressing the L or R button.
- Once you reach the RESET option, please continue reading at „General information on the reset function“.
- When reaching the END option, simply press Start. This will take you back to the regular main menu.

Function:

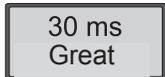
- Bestwert
- zuletzt
- wie oft?

Explanations regarding function C:

T0XX: number of trainings conducted
 V0XX: number of reinforcement conducted

Did the first click come from the **left**?
 Then press the button **L**.
 Did the first click come from the **right**?
 Then press the button **R**.

If you answer correctly, the device will praise you and increase the difficulty level for the next pair of stimuli. The two stimuli will follow each other more quickly each time, so please pay attention!



If your answer was incorrect, you can try again on a lower difficulty level. The stimuli will follow each other more slowly.

In the topline the display the order threshold value you have reached is shown, then it changes to the next value. And you already see and/or hear the pair of stimuli.

End of Training

a. Early Program Termination

You may terminate the training any time and return to the next menu step.

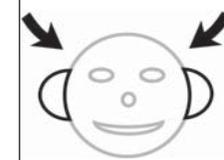
- Keep the start button pressed for at least one second. This will interrupt the training and return you to the main menu. Prior to that your achieved score will be shown as your “endscore”.

b. Automatic Program Termination

If you make three mistakes in a sequence of seven pairs of stimuli, the device terminates the program on its own. The display will show the accomplished value before the first wrong answer as the top value.

- Write this value into a copy of the result table at the back of the cover. Compare your results to the table file on page 28.

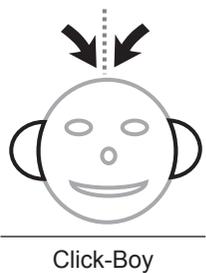
Furthermore, the device finishes the game automatically if: You fall short of 5 ms or exceed 800 ms. That is when you have reached one of the program boundaries. The display shows the the words endvalue or topscore. After 30 seconds the game selection becomes available again. You can speed up returning to the main menu by pressing the start button.



BrainB-a

Startvalue of level

| level | standard version | slow version |
|-------|------------------|--------------|
| 0 | 400 ms | 800 ms |
| 1 | 200 ms | 400 ms |
| 2 | 100 ms | 200 ms |
| 3 | 50 ms | 100 ms |



Click-Boy

3.3 ClickBoy – Game

While playing the ClickBoy you test and train your directional hearing. This is very important to be able to perceive directly sounds and especially language from different directions, to be able to assign them and to overhear them as well. You will hear two stimuli – really. But if you perceive only one click it is absolutely normal. The temporal interval between the stimuli is so small that you really cannot hear them. A sound in a room will be perceived temporarily separated by one's ears. The ClickBoy simulates this situation with two stimulies. The minimal temporal difference is enough for the brain to be able to ascertain the direction the sounds came from quite exactly.

What is your training goal?

The aim is to be able to locate sounds as exactly as possible in the room without any visual help.

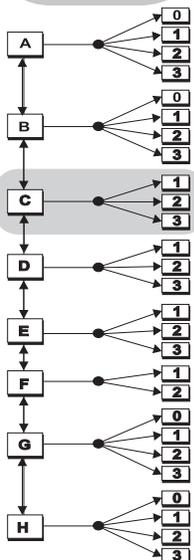
How do you practice?

- Put the plug of the headphones tightly into one of the two connecting sockets.
 - auditory training (with visual help): left socket
 - auditory testing: right socket
- For test and training put on the headphones corresponding to the description on the headphones. The headphone side with the sticker has to be on your left ear.
- Start the game ClickBoy. Follow the instructions on page 10 and 11.
- Pay exactly attention to the click – the side is important! You have 30 seconds time to give the answer. You may calmly decide at which side you heard the click.

Hint: The click seems to be very near to the centre of the head – please pay attention!

Recommended strategy:

- Train combined with auditory and visual stimuli (left headphone socket)
 - Continue with a plain auditory reinforcement run (right headphone socket)
- Handle each training function correspondingly, possibly on a daily basis.



General Rule:

Weaker – in this case higher – values for single games are **in no case** an indication of less intelligence!

This is an important information which you should also give to your children. This does of course not imply that if there are weaker results than given in the norm data for that specific age, there would be no need for training. As already mentioned in the different game descriptions, for example directional hearing or pitch discrimination can be dealt with by the brain with spending less capacity, the better the functions have been trained.

Due to this, we propose you to aim at the percent rank 80 (refer to the table below) as mid-term training aim. Our experience shows that these values can usually easily be achieved when the Brain-Boy® is used.



Result Analysis

| Spiel | Aim value (mid-term-training / percent rank 80) | | | | | | | |
|----------|---|---------------|-----------------|-----------------|----------------|---------------|------------------|------------------|
| | five years old | six years old | seven years old | eight years old | nine years old | ten years old | eleven years old | twelve years old |
| BrainB-v | 77 ms | 52 ms | 29 ms | 24 ms | 22 ms | 22 ms | 22 ms | 20 ms |
| BrainB-a | 100 ms | 83 ms | 65 ms | 49 ms | 46 ms | 45 ms | 44 ms | 42 ms |
| ClickBoy | 85 µs | 68 µs | 53 µs | 42 µs | 33 µs | 29 µs | 28 µs | 22 µs |
| SoundBoy | 25 % | 18 % | 12 % | 8 % | 6 % | 6 % | 6 % | 6 % |
| Sync-Boy | 434 ms | 398 ms | 359 ms | 322 ms | 294 ms | 270 ms | 245 ms | 223 ms |
| SpeedBoy | 916 ms | 808 ms | 720 ms | 616 ms | 548 ms | 452 ms | 384 ms | 324 ms |
| TriplBoy | 355 ms | 230 ms | 145 ms | 90 ms | 60 ms | 46 ms | 30 ms | 30 ms |
| Long-Boy | 196 ms | 176 ms | 147 ms | 127 ms | 104 ms | 83 ms | 68 ms | 53 ms |

Percent rank
 Statistic value – percent rank **80** means:
79 percent of the children of the same age had worse values
1 percent had the same values
20 percent had better values



3.9 Result Analysis

Now compare your result reached in a **test** with the values on this page. In this table you will find the average normdata for children at the age of five to twelve years.

Normdata for adults will be available on the internet (www.forschung.meditech.de) mid-term. Until then, the data for the twelve-year-old children can be taken as reference for adults.

The listed values represent the updated results for percentage rank level 50. The data was obtained in two broad studies in cooperation with the Medical University of Hanover, conducted on 584 participant.

Important: Of course, the values can only be for orientation!

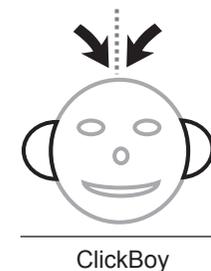
Result Analysis

| Game | Normdata (average / percent rank 50) | | | | | | | |
|----------|--------------------------------------|---------------|-----------------|-----------------|----------------|---------------|------------------|------------------|
| | five years old | six years old | seven years old | eight years old | nine years old | ten years old | eleven years old | twelve years old |
| BrainB-v | 160 ms | 108 ms | 63 ms | 47 ms | 41 ms | 38 ms | 36 ms | 35 ms |
| BrainB-a | 260 ms | 190 ms | 136 ms | 99 ms | 83 ms | 73 ms | 68 ms | 65 ms |
| ClickBoy | 157 μ s | 122 μ s | 95 μ s | 74 μ s | 59 μ s | 49 μ s | 43 μ s | 39 μ s |
| SoundBoy | 50 % | 39 % | 31 % | 24 % | 21 % | 21 % | 21 % | 21 % |
| Sync-Boy | 528 ms | 487 ms | 444 ms | 403 ms | 372 ms | 345 ms | 316 ms | 292 ms |
| SpeedBoy | 1416 ms | 1284 ms | 1172 ms | 1040 ms | 952 ms | 820 ms | 732 ms | 648 ms |
| TriplBoy | 575 ms | 405 ms | 300 ms | 220 ms | 162 ms | 142 ms | 116 ms | 116 ms |
| Long-Boy | 300 ms | 267 ms | 240 ms | 200 ms | 180 ms | 150 ms | 130 ms | 107 ms |

You will have noted that the values achieved with the BBU cannot be found in this table exactly. The values which you will find on this page as well as on the following have been established by statistical means.

5. Press one of the buttons L / R correspondingly to the side where you perceived the click signal.

Did the click come from the **left**?
Then press the button **L**.
Did the click come from the **right**?
Then press the button **R**.



If you answer correctly, the device will praise you. The following click seems to be nearer to the centre of the head. The difficulty level of the tasks increases.

55 μ s
Super

If your answer was incorrect, you can try again at a lower difficulty level. The following click will be further away from the centre of the head.

The display shows shortly the reached temporal difference reached and continues with the following value. And you already hear the next click.

End of training

a. Early Program Termination

You may terminate the training any time and return to the next menu step.

- Keep the start button pressed for at least one second. This will interrupt the training and return you to the main menu. Prior to that your achieved score will be shown as your "endscore".

b. Automatic Program Termination

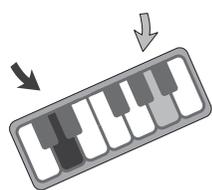
If you make three mistakes in a sequence of seven pairs of stimuli, the device terminates the program on its own. The display will show the accomplished value before the first wrong answer as the top value.

- Write this result into a copy of the result table on page 42. Compare your results to the table file on page 28.

Furthermore, the device finishes the game automatically if: You fall short of 18 μ s or exceed 600 μ s. That is when you have reached one of the program boundaries. The display shows the the words endvalue or topscore. After 30 seconds the game selection becomes available again. You can speed up returning to the main menu by pressing the start button.

Startvalue of level

| level | standard version | slow version |
|-------|------------------|--------------|
| 1 | 280 μ s | 560 μ s |
| 2 | 140 μ s | 280 μ s |
| 3 | 75 μ s | 150 μ s |



SoundBoy

3.4 SoundBoy – Game

While playing with the SoundBoy you test and train the ability to distinguish between tones with very small pitch differences. This is extremely important for speaking as well as for understanding a language.

A decisive aspect of speaking is to recognise the word stress of the pronunciation. The most important prerequisite is of course to be able to recognise small tone differences.

Emphases in spoken speech transport "hidden" messages. If these messages are overheard, there does not necessarily need to be a "mean intention" behind it. Frequently, emphases are simply not perceived.

In this game you will hear two sounds which differ only in their pitch.

What is your training goal?

The long-term aim is to be able to distinguish between the pitch of two tones as exactly as possible.

How do you practice?

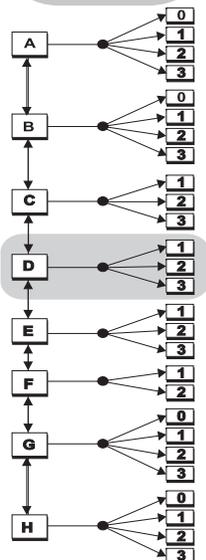
- Put the plug of the headphones tightly in one of the two connecting sockets.
 - auditory training (with visual help): left socket
 - auditory testing: right socket
- Put the headphones on.
- Start the game SoundBoy. Follow the instructions on page 10 and 11.
- Listen to the tones, this time, the order is important, it depends on the deeper tone!

For the answer, you have 30 seconds time. You may think calmly which of the tones has been the deeper one.
- Press one of the buttons L / R depending on which pitch came first:

Recommended strategy:

- Train combined with auditory and visual stimuli (left headphone socket)
- Continue with a plain auditory reinforcement run (right headphone socket)

Handle each training function correspondingly, possibly on a daily basis.



- ② ③ Was the **first** one the differing one? Then press the button **L**.
- ① ③ Was the **second** tone the differing one, then press both buttons (**L** and **R**) at the same time.
- ① ② ③ Was the **third** tone the differing one? Then press the button **R**.

If you answer correctly, the device will praise you. The next tones will be shorter and have smaller time intervals as the difficulty level increases.

If your answer was incorrect, you may try again a lower difficulty level. The following tones will be longer and have greater time intervals as the difficulty level decreases.

75 ms
Yes

The display always shows the current length and time interval of each signal. Once you release the answering button(s) you immediately hear the next tone succession.

End of Training

a) Early Program Termination

You may terminate the training any time and return to the next menu.

- Keep the start button pressed for at least one second. This will interrupt the training and return you to the main menu. Prior to that your achieved score will be shown as your "endscore".

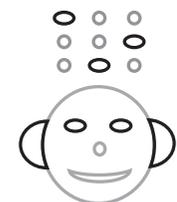
b) Automatic Program Termination

If you make three mistakes in a sequence of seven pairs of stimuli, the device terminates the program on its own. The display will show the value accomplished prior to the first incorrect answer as the top value.

- Write this result into a copy of the result table on page 42. Compare your results to the table file on page 28.

Furthermore, the device terminates the game automatically if you fall short of 10 ms or exceed 800 ms.

On either incident you have reached one of the program boundaries. The display will show "topscore" or "endvalue" plus the corresponding figure you accomplished. After 30 seconds the game selection becomes available again. You can speed up returning to the main menu by pressing the start button.

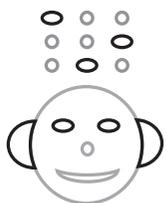


Long-Boy

Startvalue of level

| level | standard version | slow version |
|-------|------------------|--------------|
| 0 | 400 ms | 800 ms |

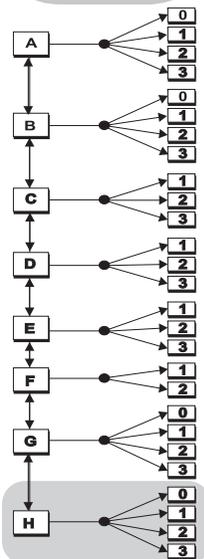
- 1 | 200 ms | 400 ms
- 2 | 100 ms | 200 ms
- 3 | 50 ms | 100 ms



Long-Boy

Recommended strategy:

1. Train combined with auditory and visual stimuli (left headphone socket)
 2. Continue with a plain auditory reinforcement run (right headphone socket)
- Handle each training function correspondingly, possibly on a daily basis.



3.8 Long-Boy – Spiel

While playing the Long-Boy you test and train your ability to recognize minimal differences in a suite of tones and to distinguish them. This ability is very important to be able to discriminate auditory sound pattern clearly from others. For each sound there is a distinct auditory representation within the brain. If very short sounds differ only slightly, some people can rarely distinguish them. The more accurate the inner representation can be accomplished, the better sounds and language patterns can be discriminated and perceived. During the training you will hear a succession of three tones, two of which are identical and one is different in frequency.

What is your training goal?

The aim is to be able to distinguish between different sound patterns.

How do you practice?

1. Put the plug of the headphones tightly in one of the two connecting sockets.
 - auditory training (with visual help): left socket
 - auditory testing: right socket
2. Start the game Long-Boy. Follow the instructions on page 10 and 11.
3. Exactly listen to the three tones and pay attention to the order of the tones. The one that is different from the others is the one you need to find!
You have up to 20 seconds for your answer. You may calmly decide which sound was the differing one.
Advice: The signals in the particular function are louder in comparison, so please be aware of that.
4. Press one of the buttons L / R correspondingly to the order of stimuli to give your answer:

Was the **first** tone deeper?
Then press the button **L**.
 Was the **second** tone deeper,
then press the button **R**.

If you answer correctly, the device will praise you. The interval between the two tones will become smaller. The difficulty level increases.

If your answer was incorrect, the interval will become a bit wider, you may try again at a lower difficulty level. The display shows the tone difference reached, and continues to the next value.

And you already hear the next pair of tones.

10 %
Good

End of training

a. Early Program Termination

You may terminate the training any time and return to the next menu step.

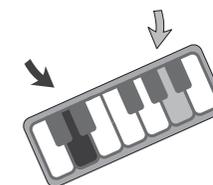
- Keep the start button pressed for at least one second. This will interrupt the training and return you to the main menu. Prior to that your achieved score will be shown as your “endscore”.

b. Automatic Program Termination

If you make three mistakes in a sequence of seven pairs of stimuli, the device terminates the program on its own. The display will show the accomplished value before the first wrong answer as the top value.

- Write this result into a copy of the result table on page 42. Compare your results to the table file on page 28.

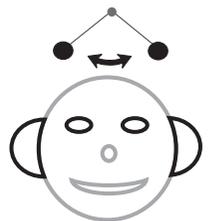
Furthermore, the device finishes the game automatically if: You fall short of 1% or exceed 65%. That is when you have reached one of the program boundaries. The display shows the the words endvalue or topscore. After 30 seconds the game selection becomes available again. You can speed up returning to the main menu by pressing the start button.



SoundBoy

Startvalue of level

| level | standard version | slow version |
|-------|------------------|--------------|
| 1 | 40 % | 80 % |
| ● 2 | 20 % | 40 % |
| 3 | 10 % | 20 % |



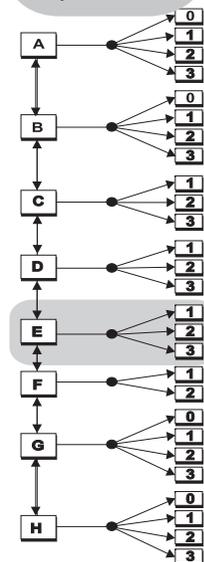
Sync-Boy

Hint:

The training with Sync-Boy should not be started before reached values corresponding to the age at BrainB-a-training

Recommended strategy:

1. Train combined with auditory and visual stimuli (left headphone socket)
 2. Continue with a plain auditory reinforcement run (right headphone socket)
- Handle each training function correspondingly, possibly on a daily basis.



3.5 Sync-Boy – Game

While playing the SyncBoy you test and train the ability to digest perceived stimuli and to convert them into movements as quickly as possible. Especially the temporarily assimilation of information plays a very important role for thinking, speaking and writing.

Auditory and visual information have to be perceived, to be taken apart, erranged and to be analysed by the brain. To be able to react quickly to words information, a fast temporal assimilation in the brain is extremely important.

During the training, clicks in a constant order will be offered to you: left, right, left, ...

Auditory digestion: you will hear short clicks

Visual digestion: you see short light flashes.

Auditory and visual digestion: You see and hear both stimuli.

What is your training goal?

The aim is to locate auditory stimuli as exactly as possible without any visual assistance.

How do you practice?

1. Put the plug of the headphones tightly in one of the two connecting sockets.
 - auditory training (with visual help): left socket
 - auditory testing: right socket
 - visual testing: no headphones
2. For test and training put on the headphones corresponding to the description on the headphones. The headphone side with the sticker has to be on your left ear.
3. Start the game SyncBoy. Follow the instructions on page 10 and 11.
4. Pay attention to the stimuli, the clicks and / or the light signs.

② ③ Was the **first** one the differing one?
 ○ ○ Then press the button **L**.

① ③ Was the **second** tone the differing one, then press both buttons (**L** and **R**) at the same time.
 ○ ●

① ② Was the **third** tone the differing one?
 ○ ○ ● Then press the button **R**.

If you answer correctly, the device will praise you. The next tones will be shorter and have smaller time intervals as the The difficulty level increases.
 If your answer was incorrect, you may try again a lower difficulty level. The following tones will be longer and have grater time intervals as the difficulty level decreases.
 The display always shows the current length and time interval of each signal. Once you release the answering button(s) you immediately hear the next tone succession.

75 ms
Yes

End of Training

a) Early Program Termination

You may terminate the training any time and return to the next menu.

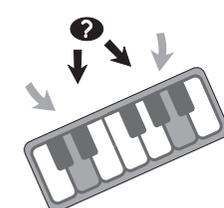
- Keep the start button pressed for at least one second. This will interrupt the training and return you to the main menu. Prior to that your achieved score will be shown as your "endscore".

b) Automatic Program Termination

If you make three mistakes in a sequence of seven pairs of stimuli, the device terminates the program on its own. The display will show the value accomplished prior to the first incorrect answer as the top value.

- Write this result into a copy of the result table on page 42. Compare your results to the table file on page 28.

Furthermore, the device terminates the game automatically if you fall short of 10 ms or exceed 800 ms. On either incident you have reached one of the program boundaries. The display shows "topscore" or "endvalue" plus the corresponding figure you accomplished. After 30 seconds the game selection becomes available again. You can speed up returning to the main menu by pressing the start button.



TripBoy

Startvalue of level

| level | standard version | slow version |
|-------|------------------|--------------|
| 0 | 400 ms | 800 ms |

- | | | |
|---|--------|--------|
| 1 | 200 ms | 400 ms |
| 2 | 100 ms | 200 ms |
| 3 | 50 ms | 100 ms |



TripIBoy

3.7 TripIBoy – Spiel

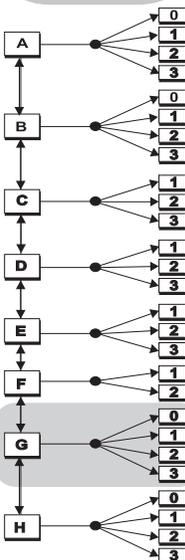
While playing the TripIBoy you test and train your ability to recognize minimal differences in a suite of tones and to distinguish them. This ability is very important to be able to discriminate auditory sound pattern clearly from others. For each sound, there is a distinct auditory representation within the brain. If very short sounds differ only slightly, some people can rarely distinguish them. The more accurate the inner representation can be accomplished, the better sounds and language patterns can be discriminated and perceived. During the training you will hear a succession of three tones, two of which are identical and one is different in frequency.

What is your training goal?

The aim is to be able to distinguish between different sound patterns

How do you practice?

- Put the plug of the headphones tightly into one of the two connecting sockets.
 - auditory training (with visual help): left socket
 - auditory testing: right socket
- Start the game TripIBoy. Follow the instructions on page 10 and 11.
- Exactly listen to the three tones and pay attention to the order of the tones. The one that is different from the others is the one you need to find! You have up to 20 seconds for your answer. You may calmly decide which sound was the differing one. Advice: The signals in the particular function are louder in comparison, so please be aware of that.
- Press one of the buttons L / R correspondingly to the order of stimuli to give your answer:



Recommended strategy:

- Train combined with auditory and visual stimuli (left headphone socket)
 - Continue with a plain auditory reinforcement run (right headphone socket)
- Handle each training function correspondingly, possibly on a daily basis.

- Press the corresponding button L / R in synchrony to the individual clicks to the best of your abilities.

Press the button **L** synchronously to the left stimulus.
Press the button **R** synchronously to the right stimulus.

- Hint: To get used to the frequency, leave some stimuli out before starting to press the buttons. This is also helpful if you once play out of time. If you can follow the given time exactly, the time will get faster. If you do not follow the time exactly enough, the speed will stay the same.
- Always adapt your pressing to the given time. The display shows the time speed which you should reach next.

End of Training

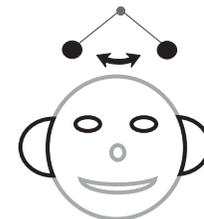
250 ms

a) Early Program Termination

- You may terminate the training any time and return to the main menu.
- Keep the start button pressed for at least one second. This will interrupt the training and return you to the main menu. Prior to that your achieved score will be shown as your “endscore”.

b) Automatic Program Termination

- In dependence to the chosen difficulty level, the program will break off the game after a set time:
- Difficulty Level 1 (Starting Level 900 sec) → after 120 sec.
 Difficulty Level 2 (Starting Level 600 sec) → after 80 sec.
 Difficulty Level 3 (Starting Level 300 sec) → after 40 sec
- Furthermore the device will terminate the program if you reach one of the game boundaries.
- Write this result into a copy of the result table on page 42. Compare your results to the table file on page 28. The display shows the words endvalue or topscore. After 30 seconds the game selection becomes available again. You can speed up returning to the main menu by pressing the start button.



Sync-Boy

Startvalue of level

| level | standard version | slow version |
|-------|------------------|--------------|
| 1 | 900 ms | 1800 ms |
| 2 | 600 ms | 1200 ms |
| 3 | 300 ms | 600 ms |



SpeedBoy

| | | |
|-------|------------------|--------------|
| level | standard version | slow version |
| ● 1 | 100 ms | 200 ms |
| 2 | 60 ms | 120 ms |

Startvalue of level



Did the first stimulus come from the **left**?

Then press the button **L**.

Did the first stimulus come from the **right**? Then press the button **R**.



If you answer correctly, the display will show your time reached, for example: 167ms.

If your answer is wrong, the device will ask you to try again the same pair of tones: again.

If you answer before hearing the second tone, the following will happen: The device will ask you to wait pair for the second tone before answering: Wait for sound. The next pair will follow your answer directly.

The difficulty level stays the same for each pair – it does not matter if you your answer was vorrect or wrong

160 ms

again

Wait for sound

End of training

You may finish the training any time and return to the main menu. Press the start button for about one second. To make an independent test possible, the game keeps the difficulty level of the task. As you cannot reach any boundaries, the device finishes the game automatically after 40 pairs of tones. The display shows the top value: 94 topscore

topscore
195 ms

- Write this result into a copy of the result table on page 42. Compare your results to the table file on page 28.

After 30 seconds the game selection becomes available again. You can speed up returning to the main menu by pressing the start button.

3.6 SpeedBoy – Game

While playing the SpeedBoy you train and test your auditory reaction time. In many situations of everyday life it is very important to concentrate in dangerous situations.

The ability of reacting to something visual is usually very well distinct. Against that, there is frequently the difficulty to act in a special auditorial situation. Usually, these actions are innate reflexes.

In this game you hear two tones from different directions and react as fast as possible.

What is your training goal?

The long-term aim of the game is to react fast and to auditory stimuli, without being dependent of any help.

How do you practice?

- Put the plug of the headphones tightly into one of the two connecting sockets.
 - auditory training (with visual help): left socket
 - auditory testing: right socket
- For test and training put on the headphones corresponding to the description on the headphones. The headphone side with the sticker has to be on your left ear.
- Start the game SpeedBoy. Follow the instructions on page 10 and 11.
- Pay exactly attention to the side the tones come from, the deeper tone is important! In this game you have to answer to the tones as fast as possible after hearing the tones.
- Press one of the buttons L / R corresponding to the order of the stimuli.



SpeedBoy

Recommended strategy:

- Train combined with auditory and visual stimuli (left headphone socket)
 - Continue with a plain auditory reinforcement run (right headphone socket)
- Handle each training function correspondingly, possibly on a daily basis.

