



Manual for

- AlphaTrainer Professional
- AlphaTrainer Home



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1. Introduction

This manual for the AlphaTrainer addresses users with and without educational/therapeutic background. It describes the functionality of both AlphaTrainer Professional and Home.

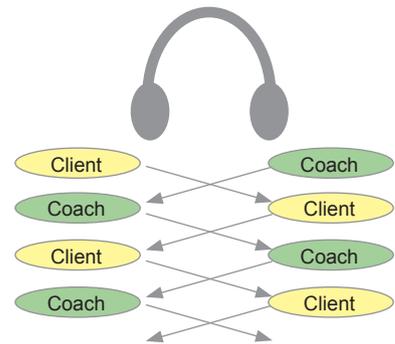
Those functions, which are available only in the Professional version, are marked as such. In this manual you will find both installation and operating instructions. It explains how you can utilize the device and which technical options are available in the respective unit. Most of all you will find explanations how you can use lateral training effectively.

1.1 Lateral training – what's that?

The AlphaTrainer is used to improve and train the interaction of the two brain hemispheres. It is particularly directed towards improving reading, writing, math and learning skills, attention, concentration as well as foreign language capabilities. You will hear either language and/or music wandering from ear to ear. In a similar fashion text or other visual impressions will be perceived alternating from side to side thanks to applying the special LCD shuttering glasses. The key is to enhance the brain's processing capabilities in both the auditory and visual modality. This is basic lateral training.

As a training device the AlphaTrainer has been designed to improve the neuronal processing capabilities for processing auditory and visual stimuli in the trainee. By alternating between left and right, the brain and its respective hemispheres are forced to acquire a higher level of performance and brain coordination. To do this, the auditory and visual senses are addressed. The brain is taught to process information in the included modalities faster and more efficiently. An emphasis is given to the ability of language perception and its respective improvement. A multistage training based on the client's original abilities is available. The ability to discriminate all critical phoneme's in a given language is one of the primary training aims. The AlphaTrainer includes a highend technology that allows for phonemes to be perceived much more clearly and brilliant both in quiet and noisy environments.

This active medical device for temporary use may be distributed and used with clients as it does not endanger the trainer, the clients or respective third parties as long as a proper installation, usage and maintenance are ensured.



¹ Dummyhead stereophony recordings provide a very realistic 3D audio impression.

1.2 Product content

- AlphaTrainer (Professional or Home)
- Power adapter (FW 7556/12 – 12 V, 1,5 A)
- Manual (for either version – home or professional)
- MediTOOLS software light version (only with Alpha Trainer Professional)

Please find more information about necessary accessories on the next page.



Please read the manual carefully prior to installing and using the AlphaTrainer device.

1.3 Necessary accessories

Note that – for safety reasons – you may only use headphones, microphones and shutter glasses - as well as corresponding splitter devices – from MediTECH's accessories supply. Only these were developed for use with the AlphaTrainer and correspond to the technical and legal safety requirements of such training systems.

Important:

Note that – for safety reasons – you may only use headphones, microphones and shutter glasses - as well as corresponding splitter devices – from MediTECH's accessories supply. Only these were developed for use with the AlphaTrainer and correspond to the technical and legal safety requirements of such training systems.

Accessories	Home training	Individual training by professionals	Group training (with up to 6 students*) / and one trainer
Headphones	2	2	2 to 6 + 1 for the trainer
Headphones splitter (6 slots)	-	-	1
Microphones	2	2	2 to 6 + 1 for the trainer
Microphone splitter (6 socket)	-	-	1
Microphone table stand	up to 2	up to 2	one per handheld microphone
Headset	up to 2	up to 2	one per handheld microphone
(instead of one headphone and one microphone)	up to 2	up to 2	up to 7
LCD Shutter glasses	1	1	up to 6
LCD Shutter glasses splitter (6 slots)	-	-	1
USB-Stick / MP3-Player	1	1	1
CD player	1	1	1
AlphaTrainer cable-set **	1	1	1

* For larger groups, additional splitters and headphones / microphones are needed. Please contact us for quotes on the corresponding set solutions.

** Consists of two essential cable sets

1. Connects CD-player and/or computer line-out as input device (line-in) for the AlphaTrainer
2. Connects the student microphone into MIC in of both the computer and the AlphaTrainer (i.e. needed for FLIC language training (Foreign Language Acquisition with the Instinct of a Child). Different programs and modules on the PC allow for audio recordings when using the AlphaTrainer.

Please note:

If you wish to record auditory information, use the LINE IN cable (the same or an additional one). Plug the cable into the LineOut socket of the AlphaTrainer and the plug with a green mark into the recording device.

The following accessories are available – please contact us if you have any questions regarding these items:

- splitter set for group training with 7 to 12 clients
- Extension cord for microphones
- Extension cord for headphones
- Extension cord for shutter glasses
- non-lateralization plug (to suppress the lateralization for the coach)

Additionally you need training materials matching your clients age and abilities.

Important:

1. Even with older clients, it is important to adapt training to the possibilities and abilities of the individual client. More often than not it is mandatory to improve the client's fundamental reading and perception skills on a very basic level.
2. Audio material which is too fast for the client to follow, will cause frustration and be impair motivation.
3. A primary training goal is the improvement of fundamental neuronal capabilities. While the requirements for the individual training tasks often are high, the content level of the material intentionally is kept low..

1.4 Differences between the AlphaTrainer PROFESSIONAL and AlphaTrainer HOME

Function	AlphaTrainer Professional	AlphaTrainer Home
Voice enhancement	on/off+ scalable	on/off
Perception discrimination trainer (for distinct phoneme distinction)	Different settings, > 400 phonemes(-combinations)	No
Input of client data (Personal data management)	infinite number	One client
Input of coach data (Personal data management)	infinite number	One coaches
Adjustment of lateral width	Yes	No
Stop function (break lateral movement)	Yes	No
Darkening (shutter glasses)	yes, darkening scalable	yes, but not scalable
Multi-Channel-Voice-Fusion MCVF	Yes	No
Additional noises	Zahlreiche Störgeräusche	rush
Interface for MediTOOLS software (settings for trainees and trainers changeable)	(on / off + skalable)	(on / off + skalable)

Limited functionality of the AlphaTrainer home version:

This manual describes both versions of the AlphaTrainer – home and professional. In part, the AlphaTrainer home functionality is limited in comparison to the professional version. Such differences are clearly pointed out in this manual.

If you use an AlphaTrainer Home and you also want to have access to the additional functions of the AlphaTrainer Professional, please get in contact with the MediTECH or your domestic MediTECH representative. Your device can be upgraded to become an AlphaTrainer Professional. We will gladly assist you in the process.

Recommended: Service contracts for the AlphaTrainer and MediTOOLS

When using the AlphaTrainer professionally, we strongly recommend a service contract for both hardware and software. This contract includes:

- Annual examination of the AlphaTrainer and its accessories.
- Extensive endurance test.
- Cleaning of the both the AlphaTrainer and its accessories.
- Necessary repairs free of charge within a two-year period after purchase.
- After two years: Replacement parts costs only, all labor costs are included..
- Guaranteed short service periods with pre-scheduled service appointments
- Written estimate of costs prior to repairs if value exceeds 50 Euro.

Within given periods of time, the functionality of the AlphaTrainer is enhanced and extended, based on user requirements and research results. Customers with full service contracts for hard- and software can receive such updates.

Important:

It is strongly recommended to ensure an annual service examination of your AlphaTrainer by the manufacturer.

2. Safety instructions

The AlphaTrainer is intended to improve specific brain capabilities related to language performance, auditory processing and sensory perception. For this purpose you have to follow the instruction steps of this manual. The use of this device for other purposes is against its provision and therefore not permitted. When operating the AlphaTrainer, you particularly have to observe the following security information:

- 
Caution! Explosion Hazard: Do not use the AlphaTrainer in rooms where the following inflammable mixtures are present – they could spark off!
 - Anesthetic mixture with air
 - Anesthetic mixture with Oxygen or Nitrous Oxide.
- 
Danger! Protect the device and the batteries against ultrasonic baths, significant humidity and chemical detergents The device could be destroyed.
- 
Caution! Note that cables of the accessory device do not become pulled out from the sockets of the device.
- 
Caution! Use the device only in dry areas and protect you it - both with the work and in the switched off condition - against wetness and humidity. They or third could be injured. In addition the device could be damaged effectively and strongly.
- 
Caution! Just use the plug power pack provided. It was developed particularly for the AlphaTrainer and corresponds to the defaults for medicine products.
- 
Caution! Do not open the case of the AlphaTrainer in any case. You or third could be injured. In addition the device could be damaged effectively and strongly. With the opening of the device automatically any adhesion and guarantee protection expire.
- 
Caution! Separate the switched off device only from electricity mains, by pulling the plug power pack out of the plug socket. Then you remove the power cable from the device.
- 
Caution! Use with training excluding the accessory device, which is recommended to you of the MediTECH. These correspond to the necessary conditions and safety regulations for medicine products and are particularly co-ordinated for lateral training.
- 
Caution! Make sure that the client at least 1.5 m far away from the CD player is.
- 
Note: For actions, which offend against these safety references and the instructions of this document, on the part of the MediTECH no warranty or adhesion is taken over.



Thoroughly review this manual prior to using the device!

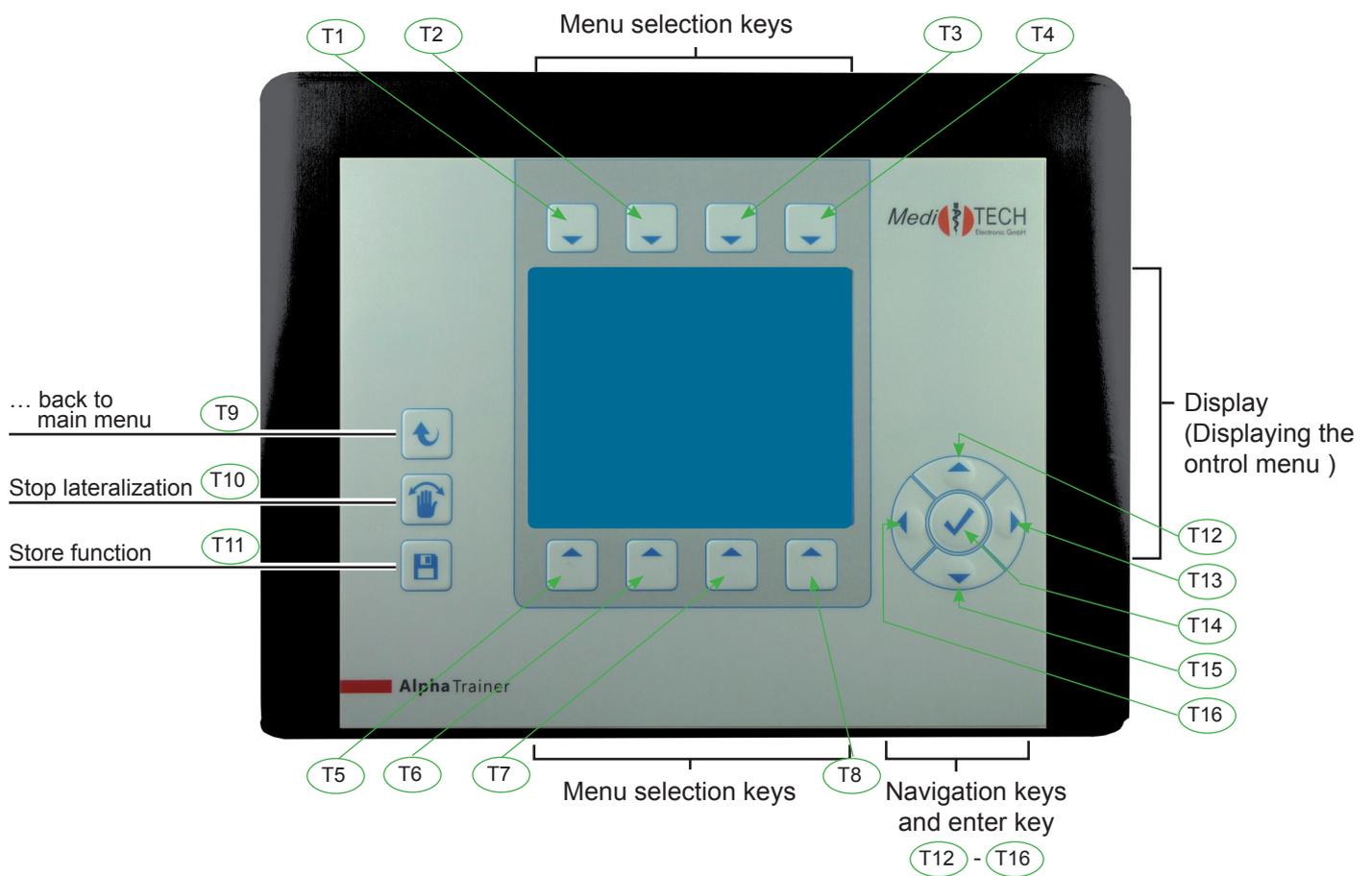
3. Top view of the AlphaTrainer

The following diagram shows all elements of the AlphaTrainer which you can apply when using this lateral training device.

3.1 Top view

Position the AlphaTrainer in front of you in order to easily be able to compare the graphic with the actual device.

The AlphaTrainer is controlled through its well structured menu which you can view and use when the device is turned on.

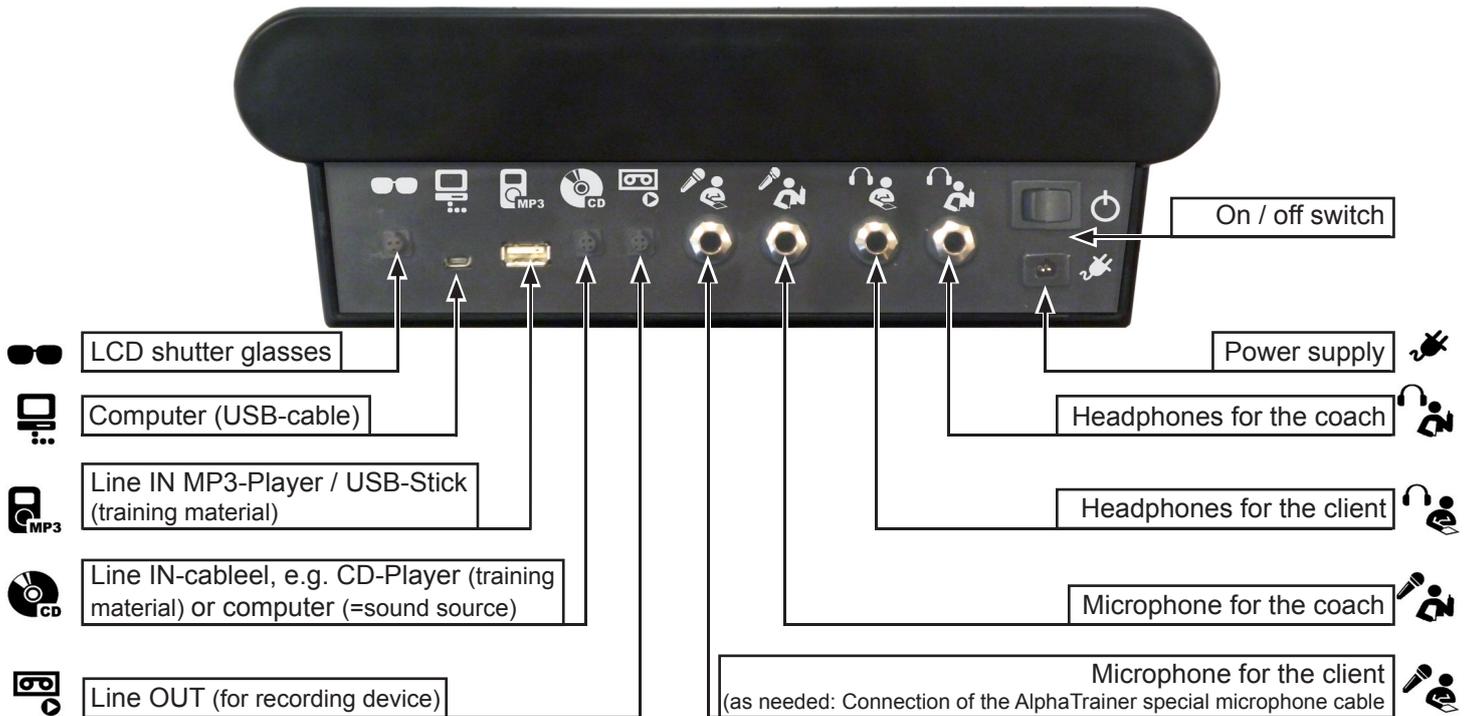


You will be introduced to the functionality on the back of the device as well as to the corresponding accessories on the next page.

3.2 Back view of the AlphaTrainer

Attach the components necessary for training (headphone, microphones, CD player, shutter glasses) to the AlphaTrainer. Make sure that headphones and microphones in particular are allocated correctly to client(s) and trainer.

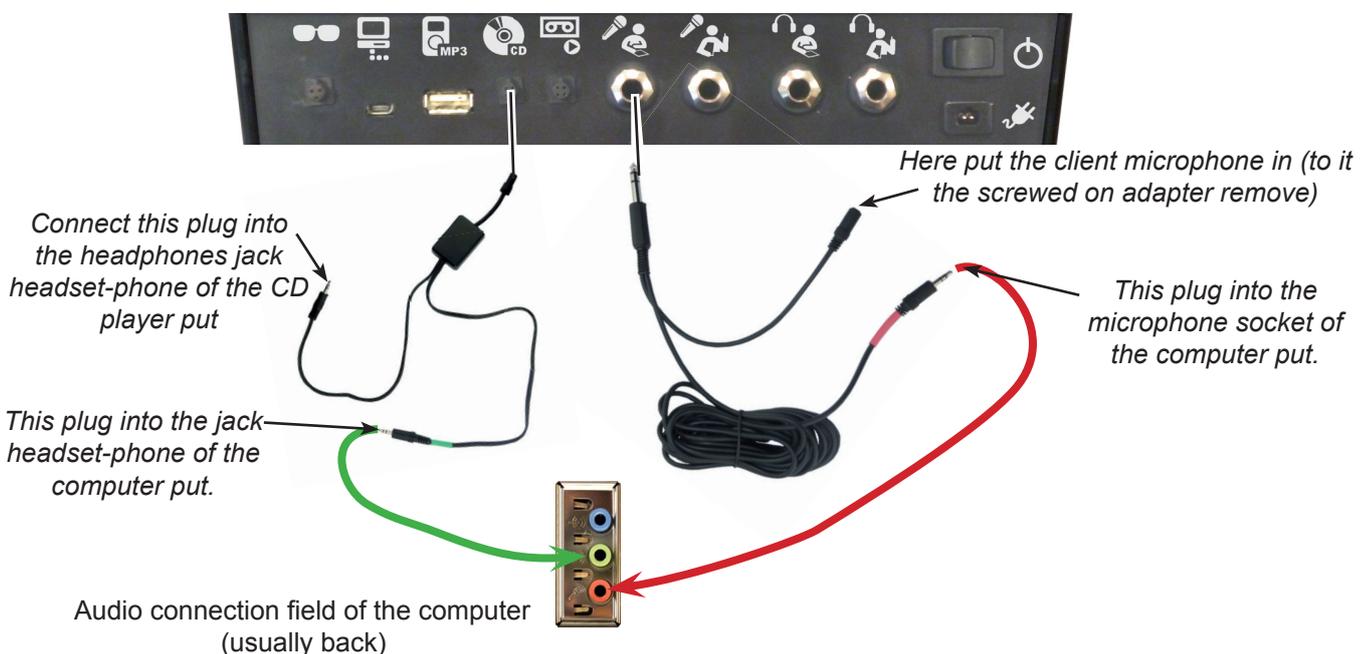
⚠ Attention! In order to avoid dangers, technical problems and disfunctions during the employment of the AlphaTrainer, it is very important that you ensure that all accessories are connected to the correct sockets.



Please note:

If you wish to record auditory information, use the LINE IN cable (the same or an additional one). Plug the cable into the LineOut socket of the AlphaTrainer and the plug with a green mark into the recording device.

3.3 How to set up the AlphaTrainer to connect to a CD-player / to run the special FLIC language training.



4. Operation of the AlphaTrainer

This guidance is to facilitate the employment of the AlphaTrainer for you. It enables you to get to know the functions time efficient.

4.1 Start-up

The AlphaTrainer is power pack-claimant device. Thus 230 V must be attached a plug socket to, before thereby can be trained.

Switch on the AlphaTrainer

1. Connect the AlphaTrainer with electricity mains:
 1. Small plug into the socket 
 2. Large plug into a normal house plug socket.
2. They scolded the device.
Press in addition the black rocker  switch to the left on the back of the device. After short time a welcome screen in the display appears on the front of the device.



4.2 Display

If this announcement is to be seen in the display, the AlphaTrainer is ready for use and indicates the main menu:

selected client
K: Möller, Tom

selected coach
T: *Muster-Trainer*

* The asterisk means:
Up-to-date no coach is selected

All settings will be saved for these persons: Volume, lateralization speed, results with the PDT,...

available menu options

Announcement for Lateralization
Indication means: Lateralization runs

Mono /Stereo function
Indication means: Stereo function is active

The meaning of the individual symbols in the main menu you infer from the overview on the continuation page.

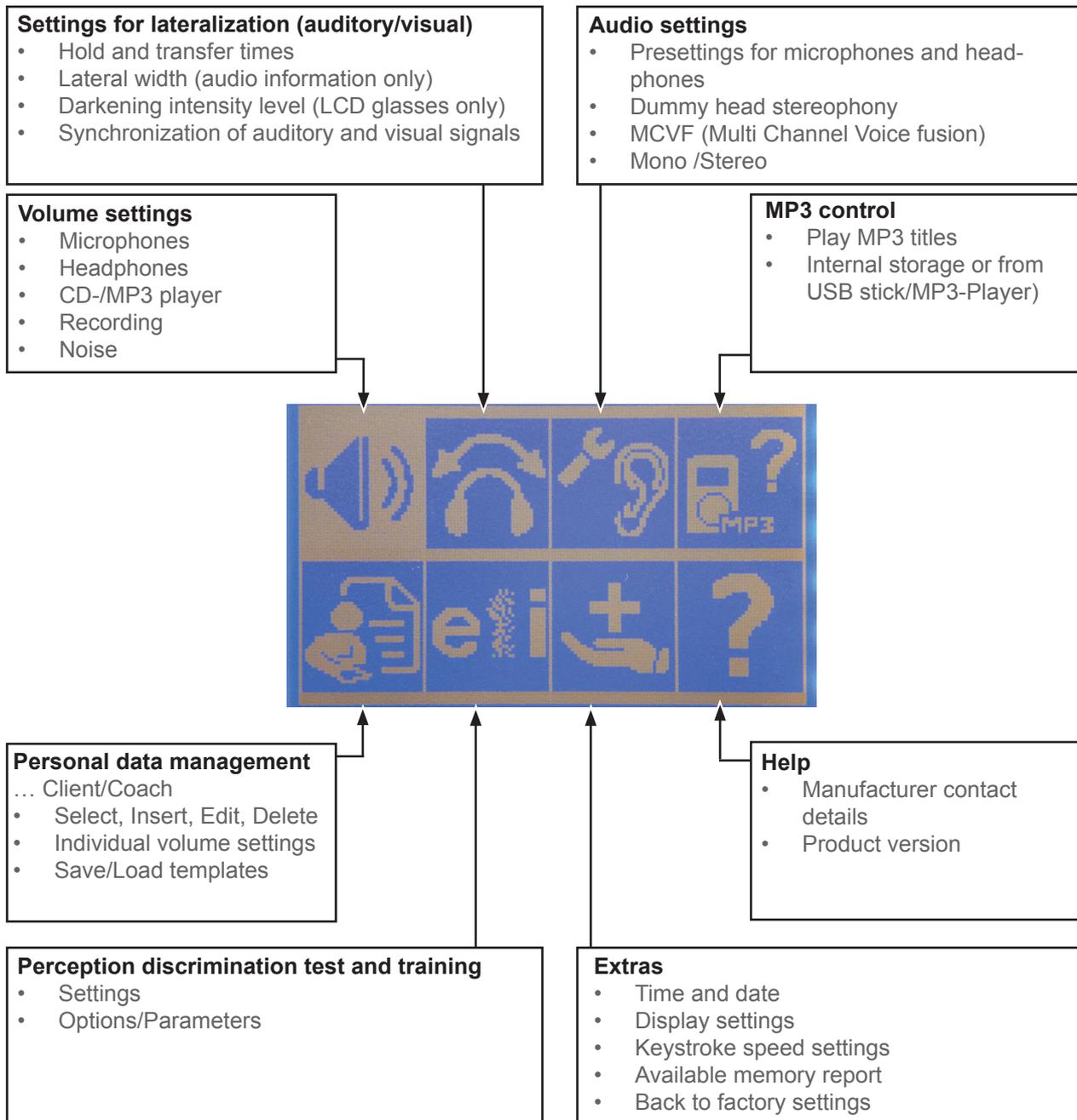
In General

4.3 Functions in the main menu

The main menu is the AlphaTrainer’s main control panel. From here, you can launch all submenues, start individual functions and adjust the available settings.

This manual is structured in such a way that each submenu is described in consecutive order.

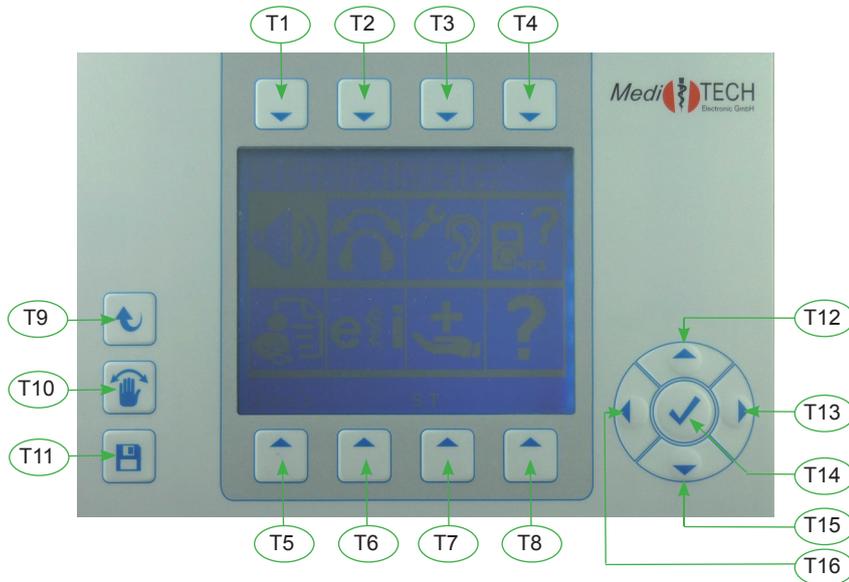
The main menu contains the following submenus:



4.4 General information on submenus

In order to change settings, select MP3 files or apply the Perception Discrimination Trainer, use of the corresponding submenus. All submenus are operated in the same way, so that you will find a general description about them below.

The respective buttons carry the same name throughout this manual. Each button has been given a corresponding number which you find here and at the beginning of each new menu description. It is recommended to memorize the corresponding names. It will help you to operate the AlphaTrainer even more easily.



Number	Function
T1 - T8	Menu selection
T9	Back to the upper menu level
T10	Stop Lateralization
T11	Save settings (main menu only)
T12 - T16	Keys for navigation
T12	Increase values
T14	Confirm settings
T15	Decrease values

1. Press the key T1 to T8 next to the respective symbol for the submenu, in order to apply / switch to the desired function. The submenu opens and the corresponding options show on the display.
2. If you are in a submenu, press T9 to return to the upper menu.

4.5 Special function keys

Return to the main menu

Press T9 (if necessary repeatedly), in order to return to the main menu from any given submenu or function. Unsaved new settings may be lost.

Stop lateralization

Press T10. The lateral movement in headphones and LCD glasses will stop immediately. The audio transmission will continue without shifting from ear to ear. You may find this function helpful i.e. with the Perception Discrimination Training when you wish to emphasize training for one particular ear. Also stop the lateral movement if your client shows any sort of discomfort.

Save settings

Limitation for AlphaTrainer HOME:
This function is only available with the
AlphaTrainer PROFESSIONAL

Changed settings or parameters will be active until you switch clients or turn off the AlphaTrainer. If you wish to save settings permanently press the T11 key in the main menu.

Menu: Volumes



Volumes

You are in the volumes menu.

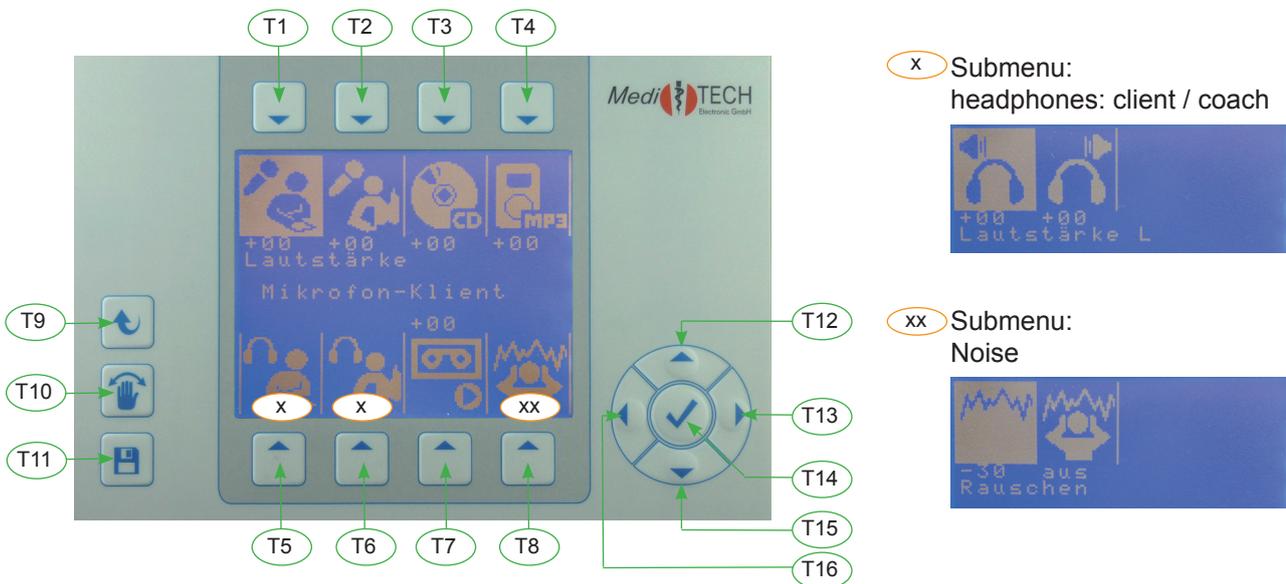
In this chapter you learn how you adjust volumes with the AlphaTrainer.

The volumes, which are important during the use of the AlphaTrainer, can be adjusted in the volumes submenu.

Exception: The volume of the syllables in the Perception Discrimination Trainer. You find corresponding references in the chapter explaining the use of the PDT training module.

Advice:

1. When adjusting volumes, plug in and use the headphones and microphones. This way you can monitor adjustments in real time and verify if they truly suit your needs and expectations.
2. Connect and use the respective components (CD player, MP3-Player, microphones,...), which you wish to adjust in volume.
3. Speak into the microphone when adjusting its volume and listen to the effect in parallel applying your headphones.



Example ... The following example describes how to adjust the trainer's microphone volume:

1. Press T2 over the corresponding symbol . The symbol is now highlighted. In the center of the display you now see the text relevant for adjusting the trainer's microphone.
2. Change the volume depending on your requirements:
 - Press T12 in order to increase the volume. The values showing on the display will increase, the audio information / language will turn louder.
 - Press T15 in order to decrease the volume. The values showing on the display will decrease, the audio information / language will turn quieter.
3. Press T14 once the volume meets your requirements.
4. Press one of the other keys (T1 and/or T2) if you wish to adjust other volume setting.
5. Press T11 once all volumes meet your requirements. Now the settings are saved for the defined trainer (or client if you adjust client volume settings).

You can find the exact approach for each option in the following chart.

How to proceed per volume option

1. Select the option, for which you wish to adjust the (chart - column Menu).
2. Make the desired changes by pressing the suggested key sequences from the chart.

Menu	Explanation	Symbol	Procedure (key sequence) --> press the following keys:
Client Micro- phone	Volume for the microphone of client(s)		<ol style="list-style-type: none"> 1. T1 (switch to desired submenu) 2. T15: decrease; T12: increase ** 3. T14 (save settings)
Trainer Micro- phone	Volume for the microphone of the trainer(s)		<ol style="list-style-type: none"> 1. T2 (switch to desired submenu) 2. T15: decrease; T12: increase ** 3. T14 (save settings)
CD input signal	CD player volume (external device)		<ol style="list-style-type: none"> 1. T3 (switch to desired submenu) 2. T15: decrease; T12: increase ** 3. T14 (save settings)
MP3-Audio	Volume of MP3 files (internal and external)		<ol style="list-style-type: none"> 1. T4 (switch to desired submenu) 2. T15: decrease; T12: increase ** 3. T14 (save settings)
Client Head- phones Volume L Volume R	Volume for the headphones of the client(s) (settings per ear left/right)	    	<ol style="list-style-type: none"> 1. T5 (switch to desired submenu) 2. T1 (switch to left ear settings) 3. T15: decrease; T12: increase ** 4. T14 (save settings) 5. T2 (switch to right ear settings) 6. T15: decrease; T12: increase ** 7. T14 (save settings) 8. T9 (back to the upper menu level)
Trainer Head- phones Volume L Volume R	Volume for the headphones of the trainer(s) (settings per ear left/right)	    	<ol style="list-style-type: none"> 1. T6 (switch to desired submenu) 2. T1 (switch to left ear settings) 3. T15: decrease; T12: increase ** 4. T14 (save settings) 5. T2 (switch to right ear settings) 6. T15: decrease; T12: increase ** 7. T14 (save settings) 8. T9 (back to the upper menu level)
Recording	Recording volume for external re- cording devices (i.e. DAT recorder, cassette player, computer, ...)		<ol style="list-style-type: none"> 1. T7 (switch to desired submenu) 2. T15: decrease; T12: increase ** 3. T14 (save settings)
Additional Noise level	<ul style="list-style-type: none"> • Noise level (scalable back- ground noise signals): • Fast on/off function 	    	<ol style="list-style-type: none"> 1. T8 (switch to desired submenu) 2. T1 (for noise levels - switch to settings submenu) 3. T15: decrease; T12: increase ** T14 (save settings) 4. T2 (for fast on/off - switch to settings sub- menu) 5. T15: off; T12: on 6. T14 (save settings) 7. T9 (back to the upper menu level)

* With additional distributors you can increase the number of clients per connection, allowing you to train with up to six clients per distributor in parallel. This is ideal for group training; it requires additional headphones and microphones (one per client).

** **Press once, several times or for an extend period of time to modify settings..**

3. Press the T9 key in order to return to main menu.
4. Press T11 in order to save the adjusted settings.

Menu: Volumes

Further background information and hints for volume settings

Volume headphones:

- Usually the volumes should be identical for both ears. If different values should appear to be necessary and a peripheral hearing impairment has not yet been determined, it is highly recommended to clarify any findings visiting ENT specialist or an equivalent health care professional.
- Increase the headphones volume of the client only gradually and carefully. The client shall listen in and describe if the settings are suitable. Reduce the values immediately, if the client feels the volume is too loud.

How do volumes interact / correspond?

- When adjusting the volumes of the microphones and external sources (i.e. CD or MP3 files), ensure to listen in on them in the process. For example, when adjusting the microphone volume, continuously speak into the microphone with a steady flow of words at approximately the identical loudness. This way you notice the effect of your adjustments immediately
- You can adjust the volume for all other sources (such as CD-player, MP3 player etc.) in the same fashion.
- Do not rely on the numbers showing on the display (+xx/- xx) as they serve only for orientation purposes. Your decision should be based on your actual hearing impression only.

Background noise

- The standard background noise is so-called “white noise”. This signal contains (almost) the entire spectrum of audible frequencies. Thus it can also be perceived by persons with specific peripheral hearing losses.
- The noise is not lateralized = not wandering from ear to ear
- Noise is used to improve language processing in noisy environments. Being able to blend out background noise and focusing on one specific auditory information (voice) is a fundamental capability for language processing in real life.

Recording...

- • You need to have an additional LINE IN cable if you wish to record lateralized information or training sessions.
- • If you wish to record a training session with a DAT or a regular tape recorder, use such an additional LINE IN cable. Insert the binder plug (black plug with indentation) into the Line OUT socket of the Alpha-Trainer. Insert the green marked plug of the cable into the microphone socket of the recording device.

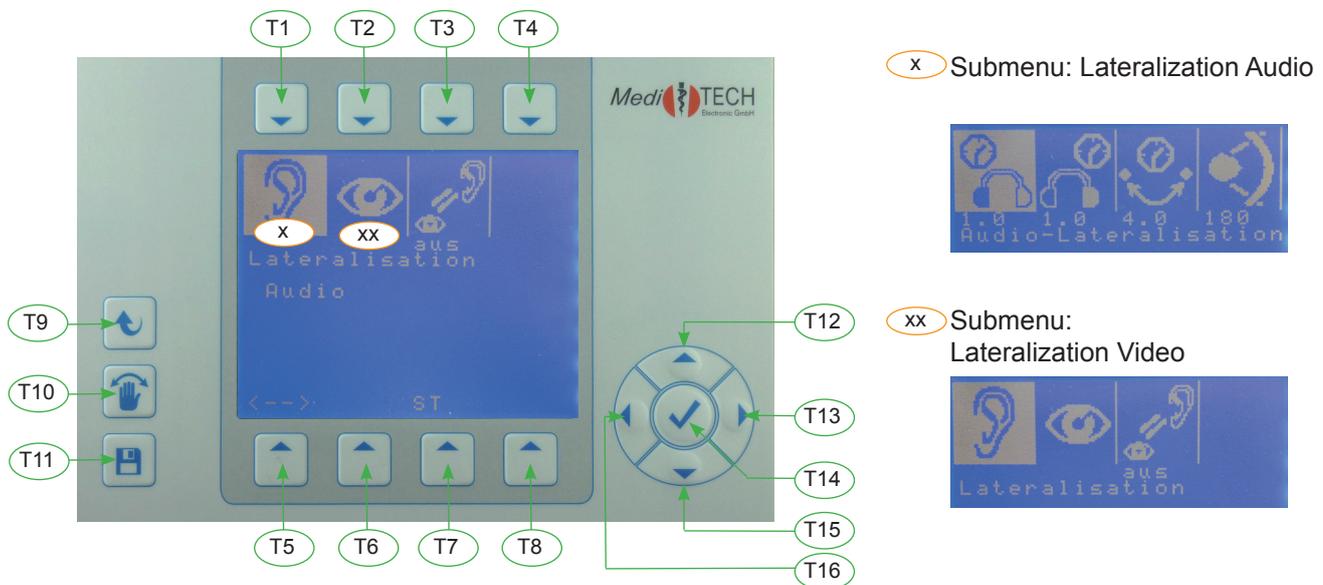


Lateralization / lateral movement from side to side

You are in the lateralization menu. In this chapter you learn how to adjust the auditory and visual lateralization of the AlphaTrainer.

Advice:

You can stop lateralization at any time by pressing the T10 key. If a client shows uneasiness or dizziness of any sort, stop lateralization immediately. The uneasiness/dizziness will pass swiftly.



Example ... This is how you adjust the transfer time of the visual lateralization:

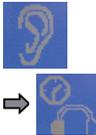
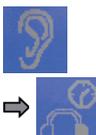
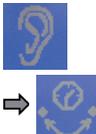
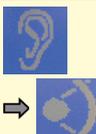
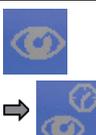
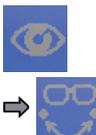
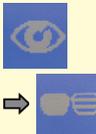
1. Press T2 over the symbol . The submenu video lateralization opens up.
2. Press T3 over the symbol . In the center of the display the current settings for the transfer time are indicated. Change these according to your requirements:
 - Press T12 in order to increase the transfer time. The values in the display will grow bigger and both eyeglass lenses will be open longer in parallel.
 - Press T15 in order to decrease the transfer time. The values in the display are reduced and both eyeglass lenses will be open in parallel for a shorter time span.
3. Press T14 if the transfer time corresponds to your requirements.
4. Press one of the other keys T1 to T4 to adjust other settings related to the visual lateralization.
5. Press T11 if all settings meet your requirements. By doing, so you save those settings for each client.

You can adjust all other settings in this submenu in the same way. The following chart describes how to proceed for each function.

Menu: Lateralization / lateral movement from side to side

How to adjust lateralization settings

1. Select the option for which you wish to adjust the settings (Chart - column menu).
2. Make the desired changes by pressing the suggested key sequences from the chart (chart - column procedure)

Menu	Explanation	Symbol	Procedure (key sequence) > Press:
Audio – hold time L	Duration settings for how long the audio signal remains on the left ear without moving		<ol style="list-style-type: none"> 1. T1 (switch to Audio submenu) 2. T1 (switch to settings submenu) 3. T15: decrease, T12: increase ** 4. T14 (save settings)
Audio – hold time R	Duration settings for how long the audio signal remains on the right ear without moving		<ol style="list-style-type: none"> 1. T1 (switch to Audio submenu) 2. T2 (switch to settings submenu) 3. T15: decrease, T12: increase ** 4. T14 (save settings)
Audio transfer time	Duration of how much time a transfer from one side to the other takes (ear to ear)		<ol style="list-style-type: none"> 1. T1 (switch to Audio submenu) 2. T3 (switch to transfer time submenu) 3. T15: decrease, T12: increase ** 4. T14 (save settings)
Audio Lateral Width Limitation: HOME	Standard setting: 180° = full shift from ear to ear, 90°: Only partial shift within a 90°-angle, adjustable in 15° steps		<ol style="list-style-type: none"> 1. T1 (switch to Audio submenu) 2. T4 (switch to lateral width submenu) 3. T15: decrease, T12: increase ** 4. T14 (save settings)
Video – hold time L	Defines for how long the left lense of the LCD glasses stays open.		<ol style="list-style-type: none"> 1. T2 (switch to Video submenu) 2. T1 (switch to video hold time L submenu) 3. T15: decrease, T12: increase ** 4. T14 (save settings)
Video – hold time R	Defines for how long the right lense of the LCD glasses stays open.		<ol style="list-style-type: none"> 1. T2 (switch to Video submenu) 2. T2 (switch to video hold time R submenu) 3. T15: decrease, T12: increase ** 4. T14 (save settings)
Video transfer time	Defines for how long both lenses of the LCD glasses stay open in parallel.		<ol style="list-style-type: none"> 1. T2 (switch to Video submenu) 2. T3 (switch to transfer time submenu) 3. T15: decrease, T12: increase ** 4. T14 (save settings)
Video Intensity Limitation: HOME	Defines the intensity of darkening for the LCD glasses. (identical for both lenses) high values = intense, low values = less intense		<ol style="list-style-type: none"> 1. T2 (switch to Video submenu) 2. T4 (switch to LCD intensity submenu) 3. T15: less intense, T12: more intense ** 4. T14 (save settings)
Audio/Video Sync	The visual settings adapt to the auditory settings (to allow for easier adaption to the use of the LCD glasses).		<ol style="list-style-type: none"> 1. T3 (switch to AV synchronicity submenu) 2. T15: off, T12: on 3. T14 (save settings)

* The voice of the client and the trainer/the external source (MP3, CD,...) are perceived as moving in opposite directions. I.e.: If the voice of the client is to be heard on the left ear, the voice of the model voice (trainer / CD) will be perceived on the right = opposing ear. The voices will wander from ear to ear constantly shifting and will briefly meet in the center when intercrossing. This description is made with reference to the client voice.

** Press T15/T12 once, several times or for an extended period of time to modify settings.

3. Press the T9 key in order to return to main menu.
4. Press T11 in order to save the adjusted settings.

Further background information and hints for lateralization settings**Lateral width ...**

Limitation - AlphaTrainer HOME:

You can only adjust the lateral width with the AlphaTrainer Professional.

- Some clients may feel slightly uneasy when the lateral width is set to 180° (when experiencing lateralization for the first time). Adjust this setting only with clients that express such a discomfort. With each training session you then increase the lateral width until reaching 180°.
- This function allows you to analyze how well your clients can direct their attention towards the lateral movement and how well they can concentrate on their respective reading task: Slightly adjust the settings for the lateral width. If the client responds to this adjustment and gets distracted from the reading task, the level of concentration is not at its best.
- In return, applying very small values for the lateral width allows you to analyze how well the spatial hearing of your client works.

Auditory-visual synchronization ...

- As soon as you change one of the settings for lateralization (hold times, transfer times) the synchronicity is no longer in place.
- This function should only be applied with clients that show difficulties using the LCD shutter glasses in parallel to the auditory stimulation. After some training sessions you should reach a level of competence in your client that allows for continuous non-synchronized training

Employment and settings for the LCD shutter glasses ...

Limitation - AlphaTrainer HOME:

With the AlphaTrainer HOME the shutter glasses can be used. With the AlphaTrainer Professional, the level of darkness intensity is scalable.

- **Note:** The client should continue to wear his regular glasses underneath the LCD shutter glasses.
- Use the LCD shutter glasses only in a later stage of the training. The client should already be accustomed to the auditory training modes.
- **Exception:** For clients with visual perception problems, the LCD shutter glasses should be used at starting at an early stage of training.
- The level of intensity for the LCD glasses should usually be set to 100%. If the client struggles with the reading process when applying the LCD glasses, temporarily reduce the level of darkening intensity. Rebuild it to 100% within a few weeks of training.
- **Important:** As with the auditory settings, ensure that you choose values comfortable for your client in order to keep him motivated for the training.

Lateralization for the coach ...

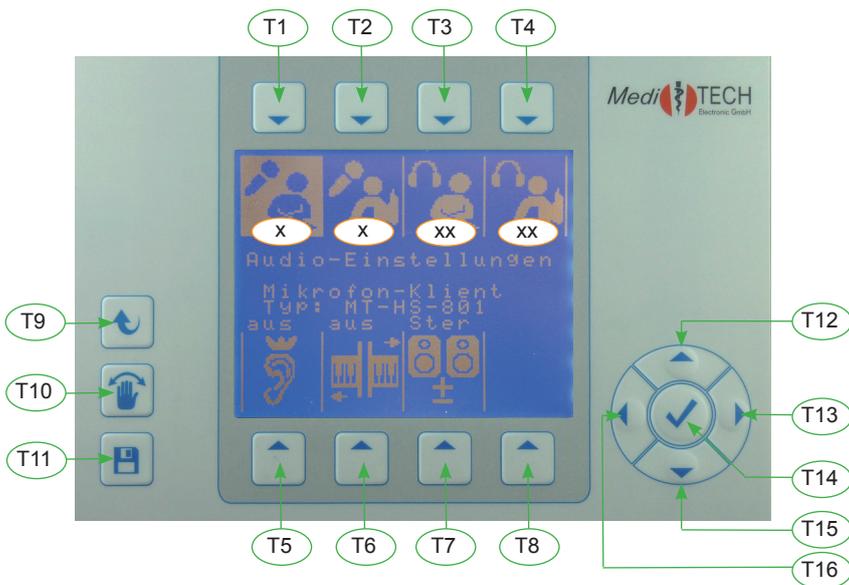
- If you drove through lateral training daily in several training units with clients, have possibly the need to hear the language normally. For this purpose you can use the non-lateralization adapter. This suppresses the movement at the jack headset-phone, at which he is attached. The lateralization to client headphones remains unimpaired of it.
- In order to use the adapter, you proceed as follows:
 1. Pull the plug at the headphone cable out of the AlphaTrainer.
 2. Put the non-lateralization plug into the device socket.
 3. Put the plug at the headphone cable into the socket of the non-lateralization plug.

Menu: Audio-Settings

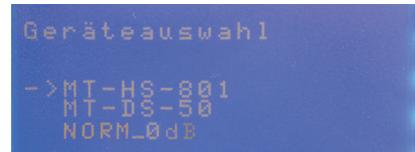


Audio Settings

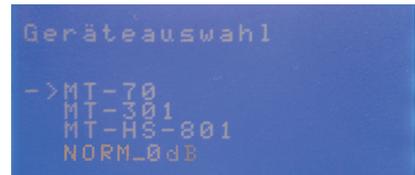
You are in the audio settings menu. In this chapter you learn how you can assign predefined microphones and headphones to clients and trainers. Furthermore, in this submenu you can define settings for consonant enhancement, MCVF (Multi Channel Voice fusion) and mono/stereo modes. You will find specific instructions of how to proceed under “Further background information and advice”.



x Submenu:
Device selection – microphones



xx Submenu:
Device selection – headphones



Example... of how to change the type of headphones for the client:

1. Press T3 on top of the symbol . The submenu “device selection” opens. The currently selected headphones are indicated by an arrow in front of it. In the lower part of the display you find further information on this currently active component.
2. Press T15 to scroll through the list.
3. Continue to press T15 until the arrow is in front of the headphones you are currently using
4. Press T14 once the arrow is in front of the headphones currently used by you and confirm your selection by clicking on the button with the YES symbol.
5. Press one of the other keys T1 to T7 if you wish to further adjust microphone and headphone types or settings.
6. Press T11 if the settings are correct in order to store the settings

In order to define / change all other settings in this menu, you simply proceed in the same way. You can find the exact approach for each option in the following chart.

How to define the audio settings

1. Select the option for which you wish to adjust the settings (Chart - column menu).
2. Make the desired changes by pressing the suggested key sequences from the chart (chart - column procedure)

Menu	Explanation	Symbol	Procedure (key sequence) > Press:
Client microphone type	Selection of microphone type you are using for your client*		<ol style="list-style-type: none"> 1. T1 (switch to device selection submenu) 2. T15 ** to mark the microphone type 3. T14 (save settings)
Coach microphone type	Selection of microphone type you are using for the coach		<ol style="list-style-type: none"> 1. T2 (switch to device selection submenu) 2. T15 ** to mark the microphone type 3. T14 (save settings)
Client headphones type	Selection of headphones type you are using for your client*		<ol style="list-style-type: none"> 1. T3 (switch to device selection submenu) 2. T15 ** to mark the headphone type 3. T14 (save settings)
Coach headphones type	Selection of headphones type you are using for the coach		<ol style="list-style-type: none"> 1. T4 (switch to device selection submenu) 2. T15 ** to mark the headphone type 3. T14 (save settings)
Enhancement Limitation: HOME	A special audio filter that strongly improves signal quality particularly of spoken language		<ol style="list-style-type: none"> 1. T5 (switch to enhancement submenu) 2. T12: increase; T15: decrease ** 3. T14 (save settings)
MCVF (Multi-Channel-Voice-Fusion) Limitation: HOME	Special extended hearing training: Frequency band training in which model voice and client voice are split up and blend into one another (explanation under further background information and advice)		<ol style="list-style-type: none"> 1. T6 (switch to MCVF audio settings submenu) 2. T12: more bands; T15: less bands ** 3. T14 (save settings)
Mono / Stereo	Switch between the mono and stereo settings - depending upon the type of audio material you are using: Stereo: for audio material recorded in dummyhead stereophony Mono: for commercial audio material		<ol style="list-style-type: none"> 1. T7 (switch to mono/stereo settings submenu) 2. T15 (toggle between mono and stereo) 3. T14 (save settings)

* When you are using more than one type of headphones or microphones, we recommend to opt for NORM_0dB as the device of choice.

** T12/T15 press once, several times or for an extended period of time until the desired settings are in place

3. Press the T9 key in order to return to main menu.
4. Press T11 in order to store the changes made.

Limitations - AlphaTrainer HOME:

- With the AlphaTrainer HOME the enhancement can be switched on or off. In the Professional version the enhancement is additionally scalable.
- The function of the MCVF is available only in the Professional version.

Menu: Audio Settings**Further background information and advice for audio settings****Type of microphone/type of headphone ...**

- Microphone and headphone types to some extent differ in their respective volume levels. With different microphones, the same speaker will still seem louder or more quiet if the settings of the AlphaTrainer are not adjusted correspondingly. The same holds true when using different headphones. Hence it is important to define the microphone and headphone types used in the training.
- In order to easily adjust to and neutralize these differences, the types of device certified for this equipment by the manufacturer are preset in the AlphaTrainer. You can simply select them from the menu.

Voice Enhancement ...**Limitation – AlphaTrainer HOME:**

With the AlphaTrainer HOME, the voice enhancement can be switched on / switched off. With the Professional version the voice enhancement is scalable (0, 25, 50, 75, 100% intensity).

- Voice enhancement is a special signal modulation, with which the volume of certain frequency ranges of language and music are increased to improve perceivability. You can increase the level of intensity in steps of 25%, 50% 75% and 100%. The fourth step (full) is then the maximally possible signal enhancement.

MCVF (Multi-Channel-Voice-Fusion) ...**Limitation - AlphaTrainer HOME:**

The MCVF function of the MCVF is available only in the Professional version.

- Imagine for a moment that the language or music which you perceive via headphones during lateral training actually are two broad coloured bands. The band produced by the client microphone is green and the model voice (trainer, CD, MP3) is blue. These bands continuously shift from ear to ear. This is the key effect that allows for the distinct training provided by lateral training.
- With the MCVF function the corresponding bands are cut full length into two and/or four thin strips. High frequencies are on one strip, low frequencies on the other. Now half of the bands switch sides while the other half stays in place, creating a whole new hearing impression.
 - With two frequency bands per signal (speaker) The low frequency bands switch sides so that half the model voice is perceived on the left, the other half on the right ear. The same holds true for the client, only the other way around.
 - With four frequency bands per signal (speaker) you have a broad band on the left consisting of green-blue-green-blue while on the right you have the blue-green-blue-green strips.
- These newly formed bands now are being lateralized and wander from ear to ear just like the usual signals would.
- When applying MCVF, both the client's and the trainer's voice blend into one another even the more than with regular lateralization alone.

Mono / Stereo ...

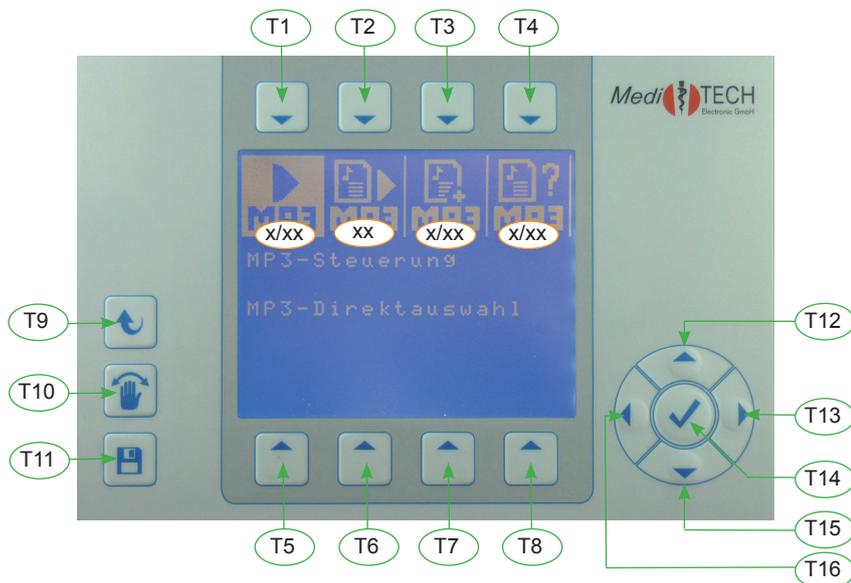
- CD and MP3 material produced by MediTECH usually is recorded in dummyhead stereophony. This recording methods creates a very realistic, 3D-like hearing impression in which differences in distance and direction are made audible. Recordings for lateral training usually are done in such a way that the model voice primarily is perceived from one direction while still being audible on the other ear, too, creating a hearing impression much closer to standard hearing situations in real life than regular stereo recordings. Any material recording with dummyhead stereophony requires the stereo setting on the AlphaTrainer.
- The settings mono is meant for commercial CD and MP3 material. In this mode you can apply your own selection of audio material or allow your client to bring his own favorite story or recording for motivation purposes. If you set the AlphaTrainer to stereo when playing a regular commercial CD, there usually is no lateralization, hence no training effect.



MP3 control

You are in the MP3 player menu. In this chapter you learn how you can

- administrate and play audio files stored as MP3 on the AlphaTrainer
- play audio files stored on an external USB stick as MP3



x Submenu:
Choice of source



xx Submenu:
play MP3 file



Example 1 ... How to play an MP3 file from a USB stick play (Menu: MP3 control --> USB mass storage)

Important: For this step a USB stick containing MP3 files must be placed in the corresponding USB slot on the back of the AlphaTrainer.

1. Press T1 over the symbol . Thus you open source selection for MP3.
2. Press T2 over the symbol . The files stored on the USB stick are listed.
3. Press T15/T12 in order to scroll through the title list. Files with the ending *.mp3 can be played. The arrow in front of the first entry indicates the first title to be played.
 - A small small box in front of an entry indicates a folder. Press T14 if you wish to play files from such a folder.
 - Titles with long names are shortened. The complete name is indicated in the lower part of the display.
4. Press T1. Thus you start the selected title. Once a title has been played, the MP3 player halts until you select a new title.



Advice: If you wish to play several titles consecutively you can create your own MP3 playlists. Follow the instructions under "create MP3 playlists". .

Menu: MP3 control

5. Consider the following functions, if you liked to intervene in the rendition

Start MP3 player	Play selected file from the beginning	
Pause MP3 player	Pause playing the selected title. Continue by pressing the same button again.	
Stop MP3 player	Stop the MP3 player	
Display corresponding text on the display	Read along: Show text on the display. Not available for all materials	
Rewind*	Rewind the title currently played and start over with an earlier sequence.	
Fast-forward*	Fast forward the title currently played and start over with a later sequence.	
previous title	Continue with the previous title.	
next title	Continue with the next title.	

* During reeling a star appears behind the symbol. If at the beginning and/or the end of the title is reached, the star changes into a box.

**Example 2... Creating an MP3 playlist from files on an external USB stick
(Menu: MP3 create MP3 playlist - USB mass storage)**

Important: For this step a USB stick containing MP3 files must be placed in the corresponding USB slot on the back of the AlphaTrainer.

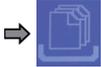
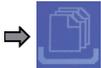
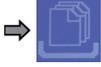
- Press T3 over the symbol .
 - If a list has already been saved, the currently active list is presented on the display. You will be asked if you wish to apply that list or create a new one.
 - Press T5 to create a new list.
- Press T2. Thus you select the attached USB stick as the media source. The files stored on the USB stick are listed. Files with the .mp3 extension can be played. The arrow in front of the first entry indicates that you may select this title now.
 - A small box in front of an entry indicates a folder. Press T14 if you wish to play files from such a folder.
 - Titles of long names are shortened. The correct name is indicated in the lower part of the display.
- Press T15/T12, in order to toggle between titles. The “active” title is indicated by the arrow.
- Press T14 to add the title marked with the arrow to the playlist. The number of list entries is increased.
- Repeat these two steps until you added all desired titles to the list.
 - If you wish to delete content from a play list, press T1 over the respective symbol . A window appears in which you confirm whether you wish to clear the current play list. Press T5 to clear the playlist and T8 to abort.
- Press T9. Thus you store the list in the internal memory. It is available as current list for the current client and can be played.



You would like to add titles from other folders to an existing play list? Continue to read under further background information and advice – on MP3 files and playlists.

How to operate the AlphaTrainer with MP3 files

1. Select the option for which you wish to adjust the settings (Chart - column menu).
2. Make the desired changes by pressing the suggested key sequences from the chart (chart - column procedure)

Menu	Explanation	Symbol	Procedure (key sequence) > Press:
MP3file selection - internal memory	Selection of an MP3 file (AlphaTrainer internal memory)	 → 	<ol style="list-style-type: none"> 1. T1 (internal memory selection) 2. Follow example 1 - starting with step 3
MP3file selection - USB mass storage *	Selection of an MP3 file (from USB stick) Only available when a USB stick is inserted into the corresponding AlphaTrainer slot.	 → 	<ol style="list-style-type: none"> 1. T1 (USB mass storage selection) 2. Follow the steps in the example 1
MP3 play playlist	Selection of the up-to-date selected MP3-Liste (Selection from MP3-Listenauswahl) If a MP3-Liste with files of the USB stick is used, exactly this stick must be put in. Title and order names may not have been changed!		<ol style="list-style-type: none"> 1. T2 (switch to playmode) 2. T1 (Play MP3 file(s)) 3. Follow example 1 - starting from step 6
MP3 create play list - internal memory	Allows you to create a playlist of your choice of titles (the list is stored in the internal memory in the AlphaTrainer)	 → 	<ol style="list-style-type: none"> 1. T3 (switch to file selection) 2. T5 (to create a new list) or 3. T8 (to extend an existing list) 4. follow example 2 - starting from step 3
MP3create play list - USB mass memory *	Allows you to create a playlist of your choice of titles (the list is stored in the internal memory in the AlphaTrainer) - usable only if the original USB stick is connected to the AlphaTrainer	 → 	<ol style="list-style-type: none"> 1. T3 ((switch to file selection) 2. Follow example 2
MP3 playlist selection - internal memory	Selection of a stored MP3-Liste Note: Lists even stored are put down in the internal memory and are here callable.	 → 	<ol style="list-style-type: none"> 1. T4 (switch to selection level) 2. T1 (switch to internal memory) 3. T12/T15 select desired list and mark it with the arrow (number of list entries and first titles are indicated for orientation) 4. T14 (select list)
MP3 playlist selection - USB mass memory *	Selection of a stored MP3-Liste Only usable, a USB stick is put in, on which by the AlphaTrainer recognizable lists are stored.	 → 	<ol style="list-style-type: none"> 1. T4 (switch to selection level) 2. T2 (to switch to UBS mass storage) 3. T12/T15 select desired list and mark it with the arrow (number of list entries and first titles are indicated for orientation) 4. T14 (select list)

* Symbol is offered only indicated/option only if a USB stick is put into the socket at the back of the AlphaTrainer.

3. Press the T9, in order to return to main menu.
4. Press T11, in order to store the made settings.

Menu: MP3 control

Further background information and advice to MP3-files and -lists

MP3 lists

Important: Lists are a collection of linkages to files. Provided and stored list refers to the USB stick, which was put in with the production. If this stick is no longer put in or if the files or the file became, in which the files are, renamed or shifted, the linkages cannot be developed any longer. Then the list concerned cannot be played.

- If you liked to add an existing MP3-Liste titles, obey example 2 in this section (example 2... It provides a MP3-Liste with files on an external USB stick) with the change that you press in the step 1 T8 for no, no new list. Consider it particularly here that the USB stick, on which the elements of the existing list are stored it is put in.
- They can cause also several times titles to a list. This can be interesting for the repetition of certain training contents.
- The USB mass storage (USB stick) is only recognized and offered by the device, if it is correctly into the socket at the back of the AlphaTrainer, planned for it, put.
- The lists, which are provided with the AlphaTrainer, are stored on the internal memory of the device



Personal data management



Client administration

Limitation – AlphaTrainer HOME:

With the AlphaTrainer HOME exactly one client and one trainer can be stored. With the AlphaTrainer PROFESSIONAL the number of clients and trainers is unlimited.

The procedures for administrating clients and trainers are identical. Only the symbols in the menu are different. Hence all explanations given here for administrating clients also apply to the trainer administration.

Menu	Explanation	Symbol	Procedure (key sequence) > Press:
Selection	Select an already existing client / group of clients * (sorted in alphabetical order)		<ol style="list-style-type: none"> 1. T1 (switch to selection menu) 2. T1 bis T7 (depending on the first letter of the client's surname) 3. T15 (click as often as needed in order to select the desired client) 4. T14 (load client)
Name search	Search for an already existing client (sorted in alphabetical order – you may enter the first letter(s) of the surname to filter the search. This is recommended for larger client databases).		<ol style="list-style-type: none"> 1. T2 (switch to name search submenu) 2. T1 bis T7 (press a softener as needed for the first letter of the client's surname) 3. T14 (once name entry is complete) 4. T15 (press a softener as needed in order to select the desired client) 5. T14 (Select client)
Add client	Add a client/a group of clients		<ol style="list-style-type: none"> 1. T3 ((switch to add client submenu) see down below for further reference ...
Edit client	Edit an existing client		<ol style="list-style-type: none"> 1. T4 (switch to edit client submenu) 2. T1 to T4 select depending on the changes you wish to make
Delete	Delete an existing client		<ol style="list-style-type: none"> 1. select client – T5 (switch to delete client submenu) 2. T5: to delete; T8: to abort deletion process
Auditory threshold	Individual settings of the auditory threshold for volume definition - here you can readjust the volume settings separately per ear (L/R)		<ol style="list-style-type: none"> 1. T6 (switch to auditory threshold submenu) – starts with left ear: 2. T12: increase; T15: decrease (if necessary press keys several times) 3. T14 (save settings and switch to settings for the right ear) 4. T12: increase; T15: decrease (if necessary press keys several times) 5. T14 (save settings)
Load Settings	Reload saved settings by pressing T7		<ol style="list-style-type: none"> 1. T7 (switch to settings submenu) 2. T1 (reload saved data – overwriting most recent changes) 3. T9 return to client administration menu)
Save settings	Save the currently defined settings (you may also press T11 at any time anywhere in the menu for this process)		<ol style="list-style-type: none"> 1. T7 (switch to settings submenu) 2. T2 Save settings 3. T5 : to delete; T8: to abort deletion process 4. T9 return to previous menu)
Load factory settings	Current settings are replaced by original factory settings		<ol style="list-style-type: none"> 1. T8 (switch to load factory settings submenu) 2. T5 to load factory settings T8 to abort

* You can create client groups just like single clients. Define them well by giving them a corresponding group name (i.e. Spellingtraining I, Foreign language training II etc.). Enter the current date as the date of birth.

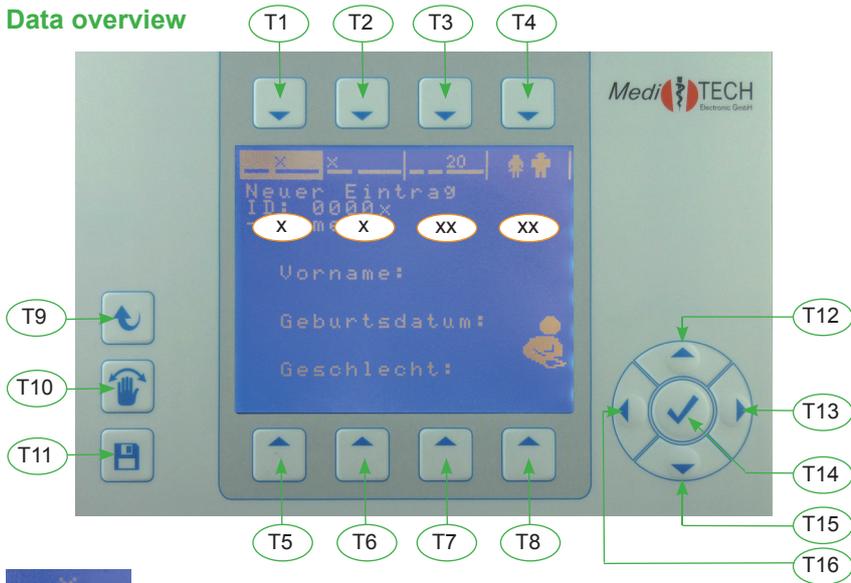
Menu: Personal data management



All menu commands are identical for trainer administration. Only the symbols on the display are different. Hence the descriptions from this manual for client administration also apply to administrating trainers with the AlphaTrainer.

You are in the client data overview

Data overview



* mandatory

Input of the surname ... *

1. Press T1 to switch to the entry mode for the surname.
2. Press one of the T1 thru T7 keys in order to enter the first letter of your client's last name. You may have to press the corresponding button up to four times depending on the letter. The currently selected letter is highlighted in the display. In this example the letter "t" is pre-selected.
3. Repeat this procedure until the last name is complete.
4. Press T14 to return to the data overview. The last name is now on display.



Level: Insert names

Please note: Even when defining a client group rather than an individual client, please ensure to complete the entry for first name, date of birth and gender. This is mandatory in order to be able to process data in and with MediTOOLS

Further advice for editing client data:

- If you mistyped, you can move the cursor under the mistyped letter by pressing the T16 key once or multiple times. Now simply replace the incorrect letter and return to where you wish to continue the client entry using the T13 or T16 key.
- If there is an additional letter you wish to erase at the end of the name, move the cursor under that letter and select a spacebar (press T8 once). This will erase that letter.

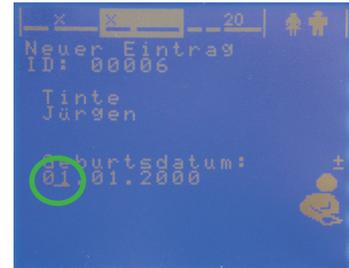
Continue with the first name ... *

5. Press T2 to switch to the corresponding submenu.
6. Repeat steps 2 through 4 which you already applied when entering the surname.
7. Press T14 to save the first name and return to the client data overview. The first name is now visible in the display.

Menu: Personal data management

 Continue with the date of birth ...

8. Press T3 to switch to the corresponding submenu. The cursor is highlighted under the first enter field which you can adjust by pressing the T12 or T15 keys. Please note that the current date format is (DD/MM/YYYY).
9. Press T12 respectively T15 until the correct day is on display.
10. Now press T13 to be able to enter the correct month.
11. Press T12 respectively T15 until you see the correct month on display.
12. Press T13 again to select the correct century (20xx is preselected).
13. Press T12 respectively T15 if you wish to change that setting.
14. Press T13 again to be able to enter the correct year.
15. Press T12 respectively T15 until you see the correct year on display.
16. Now finally press T14 to save your entries and return to client data overview.

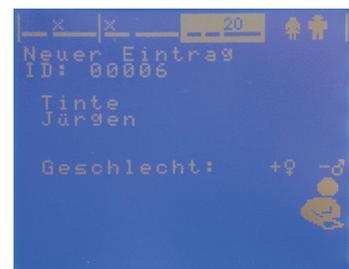


Level: Insert date of birth

Advice: If you pressed T13 prematurely you can press T16 to return to the previous entry option.

 Continue with the gender ...

17. Press T4 to switch to the corresponding submenu.
18. Then press
 - T12 if your client is female
 - T15 if your client is male
 You will find your selection in the display.
19. Press T14 in order to save your entry and return to client data overview.

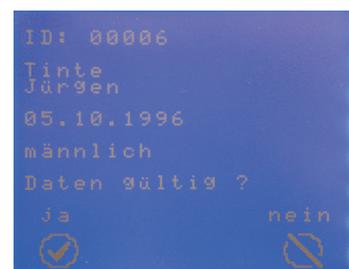


Level: Insert gender

End of entry ...

20. Press T9 to return to the upper menu and save your entries.
21. Press
 - T5 if you wish to save the data.
 - T8 if you wish to skip saving and discard the data.

Now you return to the client administration.



Confirmation

Further background information and advice for entering and editing clients

Editing ...

- Further advice for editing client data:
 - If you mistyped, you can move the cursor under the mistyped letter by pressing the T16 key once or multiple times. Now simply replace the incorrect letter and return to where you wish to continue the client entry using the T13 or T16 key.
 - If there is an additional letter you wish to erase at the end of the name, move the cursor under that letter and select a spacebar (press T8 once). This will erase that letter.

Advice: If you have the MediTOOLS software full version, you can also elegantly enter clients there using your computer keyboard and transmit them onto the AlphaTrainer Professional using the USB connection.

Menu: Perception discrimination training



PDT Control menu

(PDT = Phoneme Discrimination Training)

Limitation – AlphaTrainer HOME:

This function is just available in the professional version of the AlphaTrainer.

You are in the PDT control menu.

In this chapter you learn how you can adjust and apply the PDT to your client's specific needs. You may choose from more than 400 syllables and define your own training scenarios. Results are saved and can later be analyzed / reviewed in MediTOOLS for comparison.

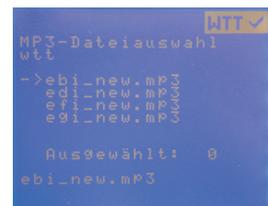
You can learn more about the PDT the *Further information and advice section below.*

* **VCV** =
Vowel-Consonant-Vowel
words, i.e. (e-f-i, a-m-u)

Example ... How to define your own syllable list:

You may create individual training lists with specific syllable groups for your client(s). They can consist of up to eight different VCV words which will be presented at random during training.

1. Press T1 on top of the symbol to open the submenu for PDT file selection. You see the first of more than 400 available VCV words from which you can choose for training. An arrow points at the first entry on your list.
2. Press T15 to scroll down that list. The arrow always marks the current VCV word which you could add to your training selection.
3. Press T15 until you found the first VCV word that you want to add to your training list.
4. Press T14 in order to add the currently marked word into the word list.
5. Repeat these two steps until your list of up to eight VCV words is complete. You can check the number of selected VCV words from the corresponding display information.



Advice: In particular select VCV words into your word group with which your client is struggling discriminating. For solid training results it is recommended to choose VCV words that are similar and easily mixed up.

6. If you select a VCV word that is already in your list, you receive a corresponding warning. Simply press T12 or T15 in order to skip the message and continue with your selection process..
7. Press T4 () once you have created a word list with less than 8 words and wish to save it. When you select 8 words, this is done automatically. A message appears asking if you wish to save your selection. You will see a complete listing of the VCV words you selected on top of that question.

Menu: Perception discrimination training

8. Press
 - T5 if you wish to save your selection as a new VCV word list. The word list will be saved under a new name - w00x.wtz (x is a variable for the next available number). Your first wordgroup will be called w001.wtz)
 - T8 if you wish to discard your entries.
9. Either way you return to the PDT control menu.

How to handle PDT control functions

1. Select the option for which you wish to adjust the settings (Chart - column menu).
2. Make the desired changes by pressing the suggested key sequences from the chart (chart - column procedure)

Menu	Explanation	Symbol	Procedure (key sequence) > Press:
Define words	Define words to create your own wordgroup		see example
Select word group	Select word group (your own or predefined)		<ol style="list-style-type: none"> 1. T2 (to switch to word group selection) – 2. see below for further reference
Predefined word groups	Select a predefined word group		<ol style="list-style-type: none"> 1. T4 – (when WTT S is to be seen) to see predefined word lists 2. T9 to activate selected list for training zu sehen ist (Liste der vorgegebenen Wortgruppen aufrufen) 3. T9 (diese Wortgruppe für das Training übernehmen)
Individual word groups	Select a word group you created using the “define words” function.		<ol style="list-style-type: none"> 1. T4 - (when WTT A is to be seen) to see individual word lists 2. T15 (to select an individually created word list – content is shown in the display) 3. T9 (to activate selected list for training)
Delete word group	Delete a word group you previously created. (Careful: Only apply if you really wish to permanently erase such a word group.		<ol style="list-style-type: none"> 1. T15 (mark specific word group for deletion) 2. T1 (back to previous menu) <ul style="list-style-type: none"> • T5 delete word group • T8 abort deletion process
Special settings	Individual settings for PDT training		See below for further instructions
Start training	Start training with the currently defined settings		See chapter “How to start PDT training” (down below)
Analysis	Evaluate training results in the display table file.		<ol style="list-style-type: none"> 1. T15 (press once or more to preselect the training sequence you wish to analyze) - Important: You must first save the training round before you can run an analysis. 2. T14 (start analysis) 3. Press any key to return to PDT control menu
Language Selection	Here you can define for which language you wish to conduct you syllable training. Additional languages can be purchased and licensed from MediTECH. Currently additional word packages are available for German, English, Polish. Further languages are under preparation		

3. Press the T9 key in order to return to the main menu.
4. Press T11 in order to store the changes made.

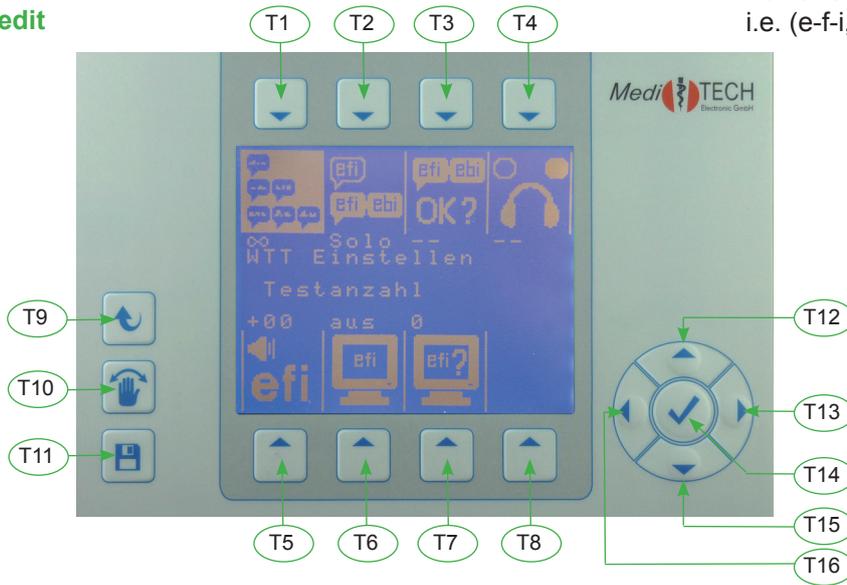
Menu: Perception discrimination training



Special settings

Submenu: PDT edit

* VCV =
Vowel-Consonant-Vowel words,
i.e. (e-f-i, a-m-u)



In this sub chapter you learn how you can individually adjust the training to your clients specific needs

Menu	Explanation	Symbol	Procedure (key sequence) > Press:
Number of items	Defines how many VCV words shall be provided in total during the training sequence.		<ol style="list-style-type: none"> 1. T1 (switch to submenu) 2. T12/T15 (increase or reduce total number of training items) 3. T14 (save settings)
Level	Defines the training mode: Either single VCV words or pairs in swift consecutive order.		<ol style="list-style-type: none"> 1. T2 (switch to submenu) 2. T15 for solo (only one word) / T12 for pair (two words 0.5 seconds apart) 3. T14 (save settings)
Doubling syllables	Only available with "level": Defines if the same VCV word may be doubled = appear twice in a sample.		<ol style="list-style-type: none"> 1. T3 (switch to submenu) 2. T15 off / T12 on 3. T14 (save settings)
Left+right	Only available with "level": Defines if the two items shall be presented on opposing ears or based upon the standard lateralization settings		<ol style="list-style-type: none"> 1. T4 (switch to submenu) 2. T15 off / T12 on 3. T14 (save settings)
Syllable volume	Allows to adjust the volume for the VCV words in comparison i.e. to background noises		<ol style="list-style-type: none"> 1. T5 (switch to submenu) 2. T15 decrease T12 increase (recommendation: Listen in and readjust as needed) 3. T14 (save settings)
Help function	Defines if the respective VCV word shall appear on the display as a help feature or not.		<ol style="list-style-type: none"> 1. T6 (switch to submenu) 2. T12 Show before audio stimulus / T15 Show after audio stimulus / off = no visual display of the word) 3. T14 (save settings)



Start Training (PDT training sequence)

In this sub chapter you learn how to conduct a PDT training sequence with a client and how to interpret the corresponding analysis afterwards.

You may conduct a training with any given setting of the AlphaTrainer. Depending on your clients needs and abilities all kinds of difficulty adjustments are available. Here are some suggestions of what you can do:

1. No further acoustic effects: CD-/ MP3 files, background noise – none of these additions – just the original training with halted lateralization (most simple approach)
2. Add lateralization as an additional effect.
3. Add one of the following option: Backgroundmusic, background voices (CD, MP3, microphone), white noise, ...
4. Multiple of the previously described options in parallel
5. Multiple of the previously described options in parallel while reducing the VCV output volume
6. Conduct the PDT training and combine it with a drawing task / motorical task, reading task
7. Conduct the PDT training and combine it with writing task
8. Conduct the PDT training and combine it with while reading a text aloud
9. ... you may modify the training with all and any of the functions available from the AlphaTrainer.

No matter what your individual settings may be, this is the standard routine for the training process:

The client is asked to put on his headphones in order to perceive his VCV words..

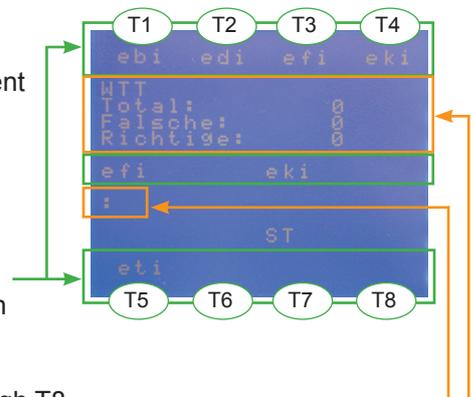
1. Select a word group (predefined or individual) and preset your training parameters as needed. (as described on the previous pages)

2. Start the training sequence. To do so, press T4 () in the PDT control menu.

This is what you see in your display:

The client perceives the first VCV word or word sequence (depending on your settings) and repeats what he just has heard. The client repeats what he heard so that you can input his response into the AlphaTrainer. Alternatively experienced clients may also press the response buttons on the AlphaTrainer on their own.

Each VCV word is represented by one of the eight available buttons in the display. (T1 through T8). In this picture T1 is ebi, T2 is edi, etc.. As in our example T6 through T8 are not defined, they remain blank.



3. Either you or the client himself presses the correct button T1 through T8 as soon as the colon appears in the display. Right afterwards the following response appears in the display::

Announcement	Meaning	Consequence
Correct	Answer was correct.	New word.
Again 1 (2/3)	Answer was wrong.	Word is repeated.
Continue...	After four incorrect answers a new item is provided.	New word.

4. Once you gave your answer and release the button, the next item is provided. What follows depends on whether or not your response is correct::

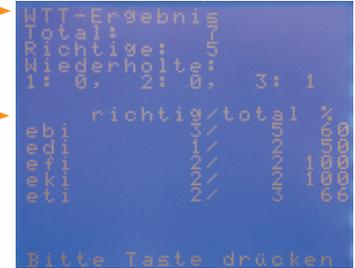
Display	Meaning
Totally	Number of tasks posed (without repetitions).
Wrong one	Error (with first attempt does not answer correctly).
Correct one	Correct answer when first offering the word.

Menu: Perception discrimination training

- Continue to respond in the same way as before until the training mode stops automatically (if so defined by you in the PDT settings (see subchapter PDT settings – test items) OR until you manually terminate the training process by pressing T9.

The display now offers the standard analysis of the entire training sequence as described in the following example: You receive a complete analysis: ...

Display	Meaning
Total	Total number of items
Correct	Words correctly recognized upon the first trial.
Incorrect	Analysis how many items were recognized after first, second, third or fourth attempt.



... as well as a word specific analysis.

Display	Meaning
Correct	Total number of items (excluding repetitions)
Total	Correct answers upon the first try.
%	Indicates how many items were identified upon first, second, third or fourth attempt. When subtracting correct responses and repetitions gives you the total number of fully non recognized items.

This analysis screen gives you the following information:

- Seven tasks were placed. (Totally: 7)
- Five tasks were answered correctly with the first answer. (Correct ones: 5)
- A task was answered correctly with the fourth attempt (third repetition). (Repeated: 1:0, 2:0, 3: 1)
- A task was not answered at all (7 tasks minus 5 correct ones minus 1 repetition = 1)
- Its own list was offered to the client, which consisted of the words ebi, edi, efi, eki and eti.
- The word ebi was offered, answered correctly five times of it three in the first attempt. That corresponds to a frequency of 60%. (ebi 3/5 60) the evaluations for the words edi, efi, eki and eti are to be read in the same way.
- It concerned a training run in the level pair - you recognize this by the fact that there were altogether seven tasks, but the number of offered words 14 amounts to. (totally with the words: 5+2+2+2+3 = 14)



- Press any key. Thus you arrive at an inquiry.
 - Press T5, if you liked to store the result.
 - Press T8, if you did not like to store the result Sie **T5**.

Thus you arrive back at WTT control.

Further background information and advice to the WTT (perception discrimination trainer)

The perception discrimination trainer offers the possibility of training in a simple manner the ability to differentiate between short sounds correctly from each other. Consonants and sounds are embedded between two vowels. In the AlphaTrainer you can arrange training arbitrarily difficult.

Whereupon constructing also a test and a training with the Wedemark present themselves perception discrimination test. Here it concerns a PC program, with which also the response time of the client can be measured and evaluated. (www.wtt.meditech.de)

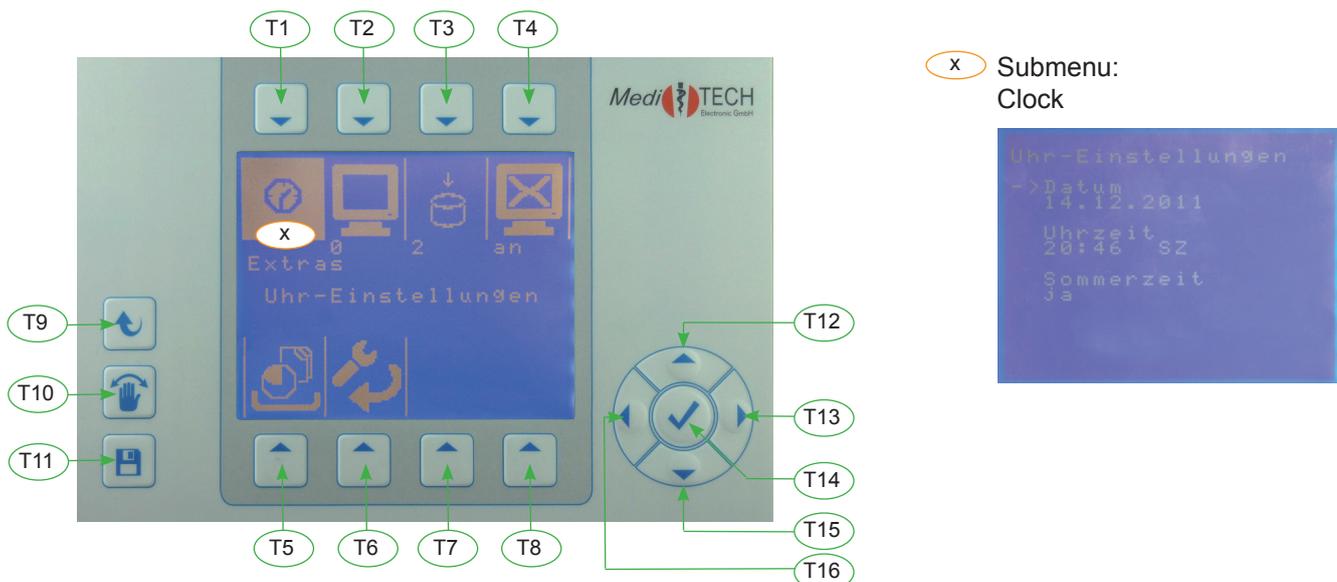


Extra

They are in the audio settings menu. In this chapter you experience, how you can change training-independent settings. In addition among other things the date and clock settings, indicator options belong such as display brightness, parameter announcement, in addition, the reaction rate with lasting branch printing.

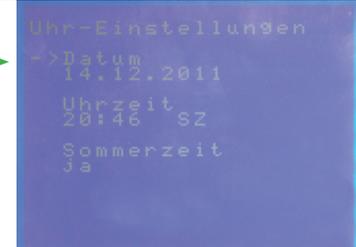
Please note:

Settings in this menu are not necessary in the normal training enterprise. Exception: In the case of conversion between summer and winter time you can change the option under clock settings, since training results date and time-exactly are stored.



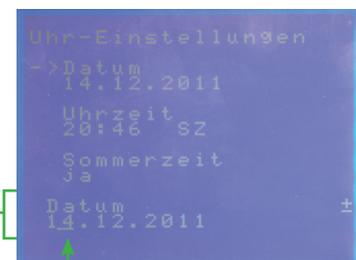
Example ... changing the clock settings - DATE:

1. Press T1 over the symbol . The submenu clock settings opens and is indicated. As well as here you know the date, the time change to indicate whether the straight summer or winter time is valid. The arrow marks the entry, which you can change straight.
 - Press T12 and/or T15, if you liked to change another entry
2. Press T14, in order to be able to change the current entry. .



... Date

3. In the lower part of the display the date is indicated.
4. The indication, which is selected straight, is marked by a small line.
 - Press T12, in order to increase the current value
 - Press T15, in order to reduce the current value
 - Press T13, in order to confirm and change to the next indication the current value. The line changes for next position (here: Month).
 - Press T16, in order to change to the preceding indication. The line changes for preceding position (here: Year) •
 - Stop the current date in this way
5. Press T15. Thus you store the date. It is indicated in the top of the display. In the same way you change the time. Consider whether the straight summer or the winter time is valid. Correct under the option summer time first this indication.
6. Press T9, in order to return to the menu extra.



Menu: Extras

Approach for the extra settings

1. Select the option, which you would like to change (table - column menu).
2. Make the desired changes (table - column procedure (key sequence))

Menu	Explanation	Symbol	Procedure (key sequence) > Press:
Clock settings	Change the date and the time - important for storing results.		<ol style="list-style-type: none"> 1. T1 (switch to clock settings submenu) 2. T1 to switch to date adjustment, T2 to switch to time adjustment, T3 to define summer/winter time Alternatively: T13/T16 Allow you to toggle between these parameter 3. T12/T15 allow you to adjust each parameter 4. T14 (save settings)
Display brightness	Change luminosity displays/the contrast between writing and background in the display. e.g. with other lighting conditions		<ol style="list-style-type: none"> 1. T2 (switch to display brightness submenu) 2. T12: increase T15: decrease * 3. T14 (save settings)
Continuous keys	Change the advancing speed with long pressures of a key. Are markings to jump fast or slowly?		<ol style="list-style-type: none"> 1. T3 (switch to quickselect key submenu) 2. T12: faster; T15: slower * 3. T14 (save settings)
Parameter announcement	Announcement of current settings under/over the symbols in a submenu. z. B. Volumes, on/out		<ol style="list-style-type: none"> 1. T4 (switch to the parameter display submenu) 2. T12: turn on; T15: turn off * 3. T14 (save settings)
Free memory	Calculation of the free storage location. Pure information. Release from storage location (=stored by clients or), if the storage location is below 25%.		<ol style="list-style-type: none"> 1. T6 (switch to free memory submenu) 2. T14 or any key to return to the extras menu.
Factory settings	Delete all changed on-positions to volume, PDT,... Put back to ex factory defined settings - for the straight selected persons!		<ol style="list-style-type: none"> 1. T5 (to switch to reset submenu) 2. T5 for reset factory settings T8 to maintain current settings

* You may press the T12 / T15 several times or for an extended period of time.

3. Press T9 to return to the main menu.
4. Press T11 in order to save the settings you adjusted.

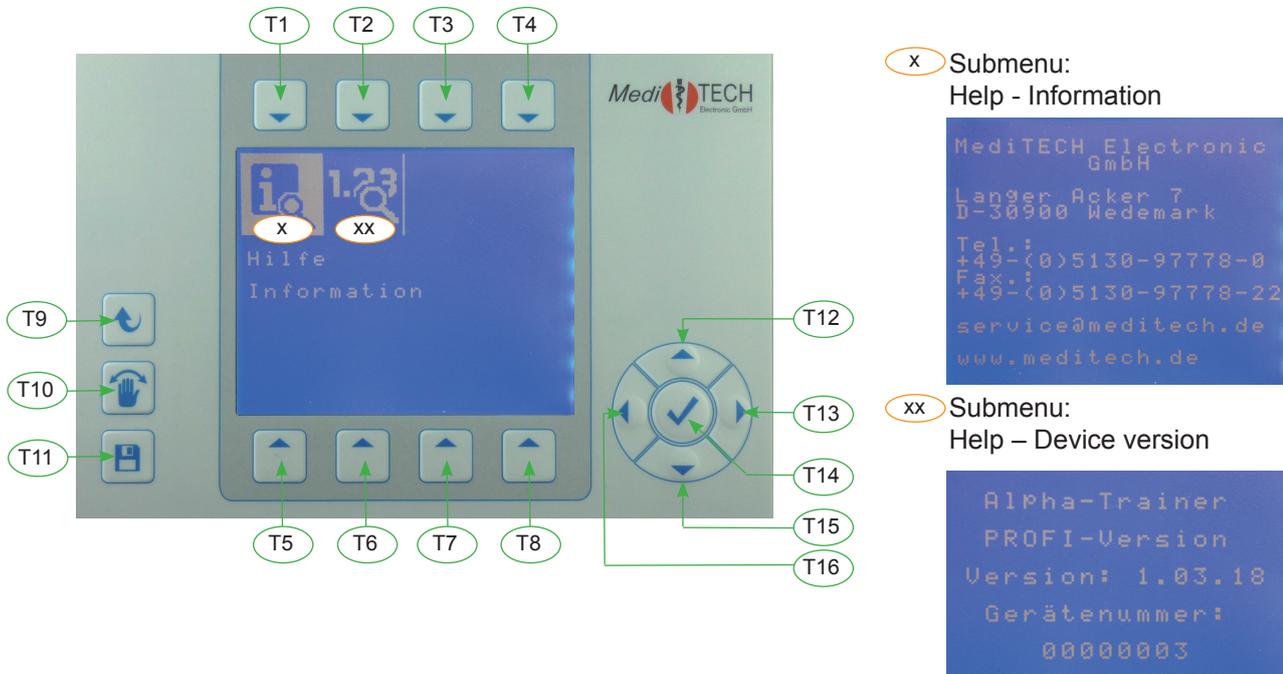
Further background information and advice on the extras menu

Clock settings ...

- Typically you only need to adjust time and date when using the AphaTrainer in different time zone. Factory setting is Standard Central European Time (Berlin).
- Adjusting the definition for summer/winter time is only necessary, if exact times in the entry screen or when saving training sessions are important to you.



You are in the help menu.
 In this chapter you learn how you can access help information provided within the AlphaTrainer. All such data are non essential.



How to proceed to view the help entries

1. Select the option, which you would like to see (table - column menu). Correspondingly you open the desired submenu.

Menu	Explanation	Symbol	Procedure (hey sequence) > Press:
Information	Manufacturer contact details		<ol style="list-style-type: none"> 1. T1 (switch to information submenu) 2. Press any key to return to help submenu
Device version	Shows the device type (home or professional), the current firmware version and the device number. You will be asked about this information when contacting MediTECH support. Please always include this information when contacting MediTECH in writing.		<ol style="list-style-type: none"> 1. T2 (switch to device version submenu) 2. Press any key to return to the help menu)

3. Press T9 to return to the main menu.

Trouble shooting

4.14 Trouble shooting

In this chapter you learn how to overcome potential obstacles when using the AlphaTrainer.

Problem	Solution
MP3: After selecting a play list and starting it you receive the message „file missing – end of playlist“ in the display.	<i>Playlists are a table file consisting of links to specific files. An individually created playlist refers to files on an external USB-Stick which was connected to the AlphaTrainer when the list was created. If this USB stick no longer is attached to the AlphaTrainer or one or more files or folders that are part of the playlist have been deleted, renamed or moved, the links can no longer be reestablished. Insert the original USB stick into the AlphaTrainer and make sure it contains all original files and folders. Then restart the playlist.</i>
There are no audio signals in the headphones or audio signals only on one ear.	<i>The headphones may be connected to the wrong socket or a mono / defect adapter may be at the end of the headphone cable. Verify that the headphones are connected to either the client's or the trainer's socket on the back of the AlphaTrainer. Take note of the corresponding symbols on the device. Check if the adapter at the end of the headphone cable has one or two black rings on it. Headphones always must have two such black rings. Replace adapters as necessary. Try switching adapters between different headphones to see if the problem remains or is solved that way.</i>
The client is not audible in the headphones when speaking into his microphone OR you hear him on the identical side as the MP3/CD signal.	<i>The microphone may be switched off or connected to the wrong socket. Verify if the microphone is turned on. Check if it is connected to the right socket on the back of the AlphaTrainer. Take note of the corresponding symbols. Fix any incorrect connections.</i>
Some of the functions described in this manual are not available.	<i>This manual is the combined operation manual for both the AlphaTrainer Home and Professional. Presumably you bought an AlphaTrainer HOME. If you wish to expand your device's functionality and upgrade your device into a professional unit, contact your domestic dealer (or, if not in place) MediTECH support directly to upgrade at cost.</i>
MP3: Only the internal memory is listed for MP3 selection.	<i>The USB mass storage (USB stick) will only be recognized and offered in the menu of properly connected to the corresponding slot on the back of the AlphaTrainer. Check the connection and – if necessary disconnect and reconnect the USB stick.</i>
Adjustments of settings are no longer in place after turning the AlphaTrainer off and back on	<i>Adjusted UNSAVED settings remain in place until you switch clients or turn the device off and back on. Always store relevant settings prior to turning off the AlphaTrainer</i>
MP3: The playlist selection does not offer any playlists for the external USB stick, even though playlists have been created with this particular stick.	<i>All playlists that you create with the AlphaTrainer, will be saved in the INTERNAL memory of the device. External playlists will usually NOT be recognized. Select the corresponding playlist in the internal memory. Follow the instructions described for the MP3 menu control <input type="checkbox"/> MP3 playlist selection <input type="checkbox"/> internal memory.</i>

Date and time are totally incorrect even though they had been set properly before.

Date and time are controlled with the help of an internal battery. This battery may be empty.

In order to replace the battery it is mandatory to send the device to the authorized MediTECH service department as you cannot conduct such service procedures on your own. Please contact our service department to discuss the details of how to proceed.

Do you have further questions, are you experiencing errors or problems when operating the AlphaTrainer? Contact our technical customer support at +49 (0) 5130-97778-55 to discuss how to best help you and support you.

Please note:

Note: We strongly recommend an annual maintenance routine for your AlphaTrainer device. MediTECH offers corresponding maintenance agreements which you may also download on the internet at www.maintenance.meditech.de.

5 Technology and maintenance

In this chapter you find technical data on the AlphaTrainer including technical accessories. Furthermore you receive explanations concerning the product identification plate and the special power adapter. You also learn how to clean, maintain, store and properly dispose of the AlphaTrainer.

5.1 Cleaning

The housing of the device, the headphones, the microphones and the LCD shutter eyeglasses must be cleaned before and after usage. Use a lint-free rag, which is dampened with a commercial disinfectant for this procedure.



Note! Absolutely consider with the cleaning the operating and security advices of the respective disinfectant manufacturer



Note! Do not bring the device under any circumstances with ultrasonic baths, flowing water and chemical cleaners, like e.g. Dilution, alcohol, etc. in contact. It could be damaged or destroyed.

The headphones foam pads and the pads for the LCD shutter eyeglasses (B 00242 and/or B 00243) must be replaced per client. Cleaning foam pads is not foreseen. Replacements can be bought in typical specialist shops or directly from MediTECH – the contact details are in the back of this manual.

5.2 Maintenance and storage

1. Make sure that only you switch off the device as therapist and pull the plug power pack from the plug socket.
2. Store the device at room temperature at a dry place.

If the device does not function perfectly any longer, contact us.



Note! It is not permitted to repair as users a defect in the device. The device could be damaged. With independent „repair attempts“ the adhesion and guarantee of the MediTECH expire.

5.3 Disposal

If the device does not function perfectly any longer, contact us.

1. Switch off the device.



Note! If you separate the device from electricity mains, you scolded it first out and pull then the plug of the power pack from the plug socket. Pull in no case first the plug on the device.

2. Separate all accessory articles from the device.



Reference The AlphaTrainer may not be disposed of in the domestic refuse, since he contains electronic construction units. Deliver the device with a garbage dressing enterprise for electronic construction units or send you on it (with a short note over the intended purpose):

MediTECH Electronic GmbH
Langer Acker 7
30900 Wedemark
Telefon: +49-(0)5130/97778-0

5.4 Identification plates

Identification plate of the AlphaTrainer

Manufacturing year

Manufacturer (name and contact details)

Article number

Device name/type

Device version (as marked off)

Serial number

-- See explanation below --

Regarding power adapter



Application components:

This symbol indicates that further components are necessary (not included in the unit's scope of delivery).

This is referring i.e. to headphones, LCD shutter glasses, CD player.



Attention, read these instructions carefully prior to using the AlphaTrainer!



Environmental disposal classification

(see chapter "disposal")

Power adapter device identification plate

Warning – Only use this device in dry rooms, otherwise electric shocks may be experienced.

Power Adapter – Connection is country dependent

Indication of safety class system: Class 2

Manufacturer details

Environmental disposal classification (see above)

Prior to first connecting your power adapter ensure to mount the correct connector for your respective country

Technical data regarding in and output voltage

Suitable for use with medical devices



Cable to be connected with the AlphaTrainer

5.5 Technical data

Power supply:	12 V (provided by the official power adapter model type L.G. 7556M/12)
Power pack data:	Input: 220-240 V/50-60 cycles per second/400 mA Output: 12 V/1.5 A
Working current:	650 mA
Life span:	approx. 5 years The year of manufacture is noted on the device identification plate
Dimensions: breadth x height x depth	29 cm x 10 cm x 21 cm (front perspective)
Weight:	1.170 g (without accessories)
Display data	display with background light (dimensions: 101 mm x 82 mm)

In operation	
Ambient temperature	+5 °C up to +40 °C
Relative air humidity	40% - 65%
Air pressure	700 - 1060 hPa

Storage and transportation	
Ambient temperature	-20 °C bis +50 °C
Relative air humidity	20% - 95%
Air pressure	700 - 1060 hPa



Attention! Only use the device in sufficiently dry environments. Protect it against wetness and humidity. The device could be damaged significantly. Thereby it could potentially cause damages or harm to the users and others



Note: Only use the original packaging for storage and transportation. Secure it sufficiently against vibrations during transport.



Note: There will be no warranty coverage for any damage caused by inappropriate handling of the device.

5.6 Technical requirements regarding the accessories

Here you find a list of the technical accessories certified for usage with the AlphaTrainer.



Attention! An air and a leakage path of at least 4 mm to all live parts within the person range is being ensured.

For safety reasons only use accredited headphones from MediTECH's product range. A selection of suitable headphones is available from MediTECH or your domestic MediTECH distributor. Please contact us at any time for assistance.

MediTECH-headphone

Impedance	100 Ohm
Frequency range	20-20000Hz
Power	200mW
Cable	1,15m shielded
Jack	6,35mm stereo jack

The headphones are permanently indicating manufacturer and model type.

It is recommended to use an open as well as an ear-surrounding pair of headphones. This way the client has the possibility to select his/her preferred set of headphones.

MediTECH-microphone

Specially adapted dynamic microphone

Jack 6,35 mm mono jack

The microphone is permanently indicating manufacturer and model type.

A suitable dynamic microphone is available from MediTECH – article number. 7963

MediTECH-LCD shutter glasses

Plug: Binder Plug 719 9747-70-03

The LCD shutter glasses are available from MediTECH – article-number 8023

Replaceable parts

For new clients and after a training course it is recommended to replace ear pads and LCD adapters as far as they got into direct contact with the client.

Ear pads for headphones MT 70 II: Article number 7997

Ear pad for headphones MT 301: Article number 7978

Ear pad for headset MT 801: Article number 7947

Nose adapter for the LCD shutter glasses: Article number B 00242

Ear adapters for the LCD shutter glasses: Article number B 00243 (a piece)

6 Service

6.1 Service garanty

With the acquisition of the AlphaTrainer made by MediTECH Electronic GmbH - Wedemark you receive a warranty of two years for unit functionality*

Apart from this warranty we offer a telephone hotline service to you for questions and problems *around lateral training* for the entire time in which you work with the device.

You can reach the telephone hotline at

+49-(0) 5130 - 97778-0

Naturally you can also send in your questions

by fax: +49-(0)5130 - 97778-22

or send them by email to: service@meditech.de

* Defects and damages caused by faulty usage of the device are excluded from warranty coverage.

6.2 EEC declaration of conformity

At www.ce.meditech.de you can find the current declaration of conformity.

For questions about operation, in case of problems, if you want to report about experiences the the devide or the method: Please contact us:

MedITECH Electronic GmbH
Langer Acker 7
D-30900 Wedemark
(Germany)

Tel.: +49 - (0) - 51 30 - 9 77 78-0
Fax: +49 - (0) - 51 30 - 9 77 78-22

Email: service@meditech.de
Internet: www.meditech.de