User Manual

Activator Pro

Version January 2026

© Handy Tech is a trademark of Help Tech GmbH & Co. KG
All Rights Reserved

Help Tech GmbH & Co. KG; Brunnenstraße 10; 72 160 Horb, Germany

Phone: +49 7451 55 46 0; Fax: +49 7451 55 46 67
E-Mail: info@helptech.de - Internet: www.helptech.de

Table of Contents

1 Discover the Activator Pro

Thank you for choosing the Activator Pro. Please take the time to study this manual. We have tried to make the operation of the Activator Pro as simple and intuitive as possible. Nevertheless, this manual will help you to make even better use of your Activator Pro.

1.1 What is the Activator Pro?

The Activator Pro is the Braille display for demanding, professional workplaces. It is available with either 64 or 80 Braille cells. It is not only impressively flat, but also offers forward-looking innovations from unprecedented hardware and software solutions for more efficiency at work.

With the high-quality, extra-flat computer keyboard, Braille input is also possible. With the additional row of function keys (F13 – F24) and the 10 QuickAccess keys (Activator Pro 80 only), the Activator Pro can be flexibly adapted to the requirements of your workplace at any time.

Another new feature is the patented ActiveSplit function, which allows two connected devices to be controlled simultaneously. Simply divide the Braille display into two sections of any size, each showing the output of the two connected devices.

The also patented BrailleShot function is the Braille display user's equivalent to a screenshot for sighted people. When you enable BrailleShot, the output on the Braille display is recorded as a text file. Combine BrailleShot with the Direct Transfer feature to transfer the text created with BrailleShot to a connected device.

Before using the Activator Pro, please read the instruction for use and safety information for the proper handling of your Activator Pro first. This can be found in a separate document on the StartStick or as a printed copy in the box.

The Activator Pro has been developed and tested with care. However, if you have any suggestions, please contact the customer advisors responsible for you directly or write to Idea@helptech.de. Your opinion is important to us.

We hope you enjoy working with your Activator Pro.

1.2 The Activator Pro at a Glance

The Activator Pro has a modern, ergonomic and flat design and is available with either 64 or 80 Braille cells. This section is intended to familiarize you with the Activator Pro and its controls. It is recommended that you pick up the Activator Pro to be able to immediately follow along with what you read here.

1.2.1 Top of the Unit

Please place the Activator Pro on the table in front of you so that the Braille display is directly in front of you. The two keys in the front center are the two space bars. The left space bar is later referred to as [SPCL] and the right one correspondingly as [SPCR]. In case that both left and right space bars can be pressed, they are designated [SPC].

Behind the space bars are the 64 and 80 ergonomic Braille cells with integrated cursor routing keys. With the integrated cursor routing keys, hereinafter referred to as [CR] keys, the cursor can be placed directly at the text position of a specific Braille cell.

To the left and right of the Braille display there are three separate navigation keys, marked N followed by 1 to 6, according to the arrangement of the Braille dots. So at the top left [N1], below [N2] and [N3], on the right [N4], [N5] and [N6]. They are embedded in the housing in such a way that they do not stand out from the Braille cells. The navigation keys have the following functions:

The upper left or right navigation key serves as a reading key to move back in the text and is subsequently called [N1] or [N4].

The lower left or right navigation key is used for reading forward and is subsequently called [N3] or [N6].

When the left or right center navigation key is pressed, various additional functions are triggered. The following is an overview of the naming of the navigation keys:

Left navigation key, up: [N1]
Left navigation key, center: [N2]
Left navigation key, down: [N3]

Right navigation key, up: [N4]
Right navigation key, center: [N5]
Right navigation key, down: [N6]

The high-quality, ultra-slim computer keyboard is located above the Braille cells. In addition to a standard keyboard, this one has an extra row of function keys (F13 to F24) at the very top, as well as three blue special keys directly next to them. You can read about the functions of these additional keys in chapter 6 The Computer Keyboard.

The Activator Pro 80 is also equipped with 10 QuickAccess keys to the right of the keyboard. These are labeled from the top left to the bottom right with [QA1] to [QA10]. This means that the top two keys are called [QA1] and [QA2], below them are [QA3] and [QA4] and so on. You can find a description of these [QA] keys in chapter 5.1 The 10 QuickAccess .

The Activator Pro 64 does not have these 10 [QA] keys due to its shorter design. The functions of these [QA] keys can be called up by pressing {Fn+digit 1 to 0}. This means that pressing {Fn+1} triggers the same function as [QA1] on the Activator Pro 80 and {Fn+0} is equivalent to [QA10].

1.2.2 Left side of the Device

If you move from front to back on the left side of the case, you can feel the round on/off button. There is a USB-C port about 0.78 inch (2 cm) behind it for connecting the Activator Pro to a PC or, if necessary, for power supply via a plug-in power supply.

Note: The Activator Pro is powered exclusively via this interface.

1.2.3 Right side of the Device

On the right side of the case, there is another USB-C port for connecting the Activator Pro to a PC, tablet or mobile phone. This port does not power the Activator Pro.

1.2.4 Conventions Used in This Manual

In this manual, the following conventions are used for inputs and outputs on the Activator Pro and on the PC:

Single Braille key presses:	[Key2] e.g. [N2]
Key/dot combination in Braille input mode:	[SPC + 1 2]
Display on the Activator Pro:	**'Display Text'** such as **'File'**
Single keystrokes on PC keyboard:	{Key}, e.g. {ENTER}
Text input on PC keyboard:	{input text}, e.g. {HTCom}
Text output on PC:	"output text" such as "Done"

2 Installation

This section contains helpful information about how to install your Activator Pro. Please read it carefully to prevent difficulties while setting up.

2.1 Package Contents

Please verify that your package contains all of the items listed below. If one of the components is missing or damaged, please contact us in order to request the missing part or a replacement.

You should find enclosed the following:

- Activator Pro
- Carrier bag
- 1 USB-C connection cable approx. 59 inch (150 cm) with USB-A adapter
- 1 USB-C connection cable approx. 19 inch (50 cm)
- Manual and safety instructions
- USB StartStick (manuals and software packages)
- Lightning Adapter (optional)

2.2 Software Installation

To enable you to operate the different systems with your Activator Pro, we have developed programs for connecting the Activator Pro. You will find these software components together with the current manual and brief instructions on the StartStick supplied.

We are constantly developing extended and improved versions of our software components. Therefore, we recommend that you update the StartStick from time to time. The easiest way to do this is to select the entry "Update all components" under the menu item "File" in the HTStart program.

2.2.1 StartStick

The StartStick with the HTStart program is a USB stick that contains all relevant software components and documents you need to operate your Help Tech Braille display. Additionally, it contains the free screen reader NVDA, so that you can operate the PC immediately, even if no screen reader (e.g. JAWS) is installed yet.

Once you have connected the StartStick to your PC, run the program start.exe in the root directory. If a screen reader is already installed, it will be offered for use. Otherwise, the included screen reader NVDA creates access for you via speech output and Help Tech Braille display.

HTStart detects which Braille display is connected to your PC and automatically preselects all necessary software components for installation. Depending on the security settings of your operating system, you may be asked to allow HTStart to run. Your consent is required for HTStart to detect and display the installed screen readers. Please allow HTStart to run, otherwise you will not be able to use the program.

After you have selected a screen reader, the HTStart window will open. All supported Help Tech products are listed here.

The language is preselected based on your Windows settings. However, you can select another language in the drop-down list. After that you will find the available manuals in the selected language under the products. If a manual in this language is not available, the English manual will be displayed instead.

You can determine which components of the software should be installed. The choices are:

- Activator Pro Firmware and Documents: To update the internal functions of your Activator Pro and the manuals.
- HTCom: Communication program for data transfer between PC and Activator Pro.

We recommend that you keep the default settings. All required software components will then be installed and a desktop shortcut to the HTCom program will be set up. After completing the installation program, you will find a group called "Help Tech" in the Start menu under Programs. In it you will find the following subgroups:

- Braille Driver: Under this you will find the Activator Pro's key assignment for your screen reader.
- Activator Pro with version number appended: For version 1.0 of the software, this is e.g. "Activator Pro 1.0". Below you will find this manual, the uninstaller, the firmware update program, and important notes.
- HTCom: Below you will find a description of HTCom, the program HTCom itself, as well as the uninstallation program.

After successful installation you can connect your Activator Pro to your computer. In the installation directory of the Activator Pro firmware you will find the following subdirectories (applies to complete installation):

- Firmware: Contains four files for the internal programming of your Activator Pro, as well as system files
- Manuals: Contains this manual and other important information.
- KeyboardLayouts: Contains different keyboard files for different country variants.
- Uninstall: Contains the program to uninstall the software.

In addition to the Start menu, you can also launch HTCom from the shortcut on your desktop, or by using the default key combination {Ctrl+Shift+H}.

For a detailed description of how to use HTCom, please refer to the separate manual "File Transfer between PC and Braille System", which can be found in the subdirectory "HTCom". Please also read chapter 4.2.6 Transferring data between the Activator Pro and a PC.

2.2.2 NVDA and JAWS

The current versions of the screen readers from July 2024 automatically support the Activator Pro. It is not necessary to install control programs, so-called drivers.

- NVDA (from version 2024.3)
- JAWS (from September 2024 version: 4.5.0.0)
- iOS V17.6 or higher

Only the HTCom data transfer program needs to be installed separately.

Connect the Activator Pro to the PC using the USB-C cable (see Chapter 2.3 Connecting the Interface Cable). The Activator Pro will turn on and the power-on message will appear.

The Activator Pro is detected directly when starting JAWS. When you start it for the first time, you will see an indicator titled "Handy Tech JAWS Driver" and the information "Activator Pro, USB-HID interface, as well as the current driver version".

If another Braille display is connected to the PC while JAWS is running, it is also immediately recognized and controlled.

Instructions on how to use JAWS and how to assign the keys of the Activator Pro in JAWS can be found in chapter 7.2 Screen readers using Windows: Example JAWS.

2.3 Connecting the Interface Cable

Your Activator Pro can be connected to the PC either via a USB port or via the wireless Bluetooth interface. If the Activator Pro is used in accordance with the medical device standard, the PC to which it is connected must also comply with the medical device standard, be additionally grounded or be connected to an isolating transformer.

To connect the Activator Pro to your PC via the USB port, use the included USB connection cable. The USB connection cable has a small oval connector at both ends - the USB-C port. At one end, in addition to the USB-C port, you'll find a larger flat USB-A adapter. Plug the small oval USB connector into the USB-C socket on the left side of the device. You can connect the end with the adapter to either the USB-C or USB-A port of the PC.

If the PC is switched on, the Activator Pro is automatically recognized by USB-enabled operating systems.

If the Activator Pro is connected to the PC with a USB cable on the left side, its power supply is ensured via the PC. Please make sure that the PC is plugged into a power outlet.

Note: The Activator Pro is not powered via the right USB-C port.

2.4 Installation of the Bluetooth Tie-In

Since the Activator Pro is equipped with a Bluetooth transmission module, you can also wirelessly connect the Activator Pro to up to three different devices at the same time (e.g. computer, smartphone, tablet). The Activator Pro automatically switches to the currently active data source, i.e. to one of the up to three Bluetooth connections that was last active or to the USB connection to the PC. When switching, the Bluetooth device name is displayed, if available. In the other case, "Bluetooth device" is displayed followed by a number from 1 to 3.

If no Bluetooth or USB connection is active, the Activator Pro will automatically switch to internal menu mode. For example, if the Activator Pro is connected to an iPhone via Bluetooth and it switches to the lock screen, you can unlock your iPhone with the [N2] key and continue working directly with the Activator Pro.

If you want to return to the internal functions of the Activator Pro, such as the editor, you can switch to menu mode by pressing the left special key. They are then back in the same place in the internal menu mode from which the Bluetooth connection was switched to, e.g. in a note.

Switching between the USB ports and the three Bluetooth channels can also be done manually by pressing the left special key. This involves switching between existing connections in turn. If there is only one connection, switching is not possible.

Bluetooth is automatically active when you turn on the Activator Pro. If you don't connect to Bluetooth within 15 minutes, the Bluetooth interface will automatically turn off.

The range of wireless transmission is about 10 meters.

2.4.1 Bluetooth-PC Tie-In

1. Please make sure that the Activator Pro is switched on and Bluetooth is enabled. For this purpose, it may be necessary to switch the device off and on again.
2. Select "Bluetooth Devices" from the control panel or from your system tray and press the context menu key.
3. Select the “new device/connection” item.
4. "Add Bluetooth Device Wizard" will appear.
5. All detected Bluetooth devices will be listed. Select the Activator Pro from the list and press "Next".
6. Now the pairing will be done, and the needed drivers will be installed. Please wait a moment. Please confirm by pressing "Finish". The Activator Pro is ready to use when all the needed drivers have been successfully installed.

Your Activator Pro has now established a Bluetooth connection to the PC and you can utilize all of its functions, as if it were connected via the USB cable.

2.4.2 Bluetooth Apple iOS Device Tie-In

Mobile devices from Apple, such as the iPhone or iPad, have the screen reader VoiceOver as standard, which enables blind and visually impaired people to operate via voice output. If you are using an iPhone, we recommend connecting directly via the USB-C port or with the optional Lightning adapter. Please note that it is not possible to use our HelpTech+ app if you have a Bluetooth connection. To connect the Activator Pro to an Apple device, you must first enable VoiceOver. To do this, follow these steps:

1. Please make sure that your Activator Pro is turned on and the Bluetooth interface is active. The Activator Pro exits pairing mode 15 minutes after switching on. Therefore, it may be necessary to turn the Activator Pro off and on again.
2. Open "Settings" from the main menu of the Apple device.
3. Select the "Accessibility" setting.
4. Select "VoiceOver" and turn it on.
5. At the bottom of the accessibility page, select Braille.
6. If Bluetooth is turned off, the Apple device will alert you. You should now enable Bluetooth so that the Apple device can find the Activator Pro.
7. In the "Braille display" field, all Bluetooth Braille displays found will be listed. Select the Activator Pro here.
8. The Bluetooth connection is established and you can now read what is shown on the display on the Braille display.

Note: If the connection is lost because you have turned off or put the Apple device off or into sleep mode, activate the Activator Pro first and then the Apple device. Then the connection can be re-established automatically.

We recommend that you start VoiceOver on the shortcut "Press the side button 3 times". You can set this under the "Shortcut" option in Settings/Accessibility. Select VoiceOver here.

2.5 Connecting iPhone to Activator Pro via USB

To connect your iPhone to the Activator Pro, please use the included USB-C cable. If your iPhone has a Lightning port, use the optional Lightning adapter, which we will be happy to provide you if required. If the iPhone has been connected to the Activator Pro via Bluetooth in advance, we recommend deactivating the iPhone's Bluetooth interface to ensure that the connection is made via the USB-C cable. If the Activator Pro is powered by a PC or a power outlet, the excess power that is not used to power the Activator Pro is used to charge the iPhone.

2.6 Technical Specifications

- 64 or 80 concave Braille elements with adjustable pen thickness
- 64 or 80 cursor routing keys
- 6 dedicated navigation keys
- 2 space bars
- Ultra-slim computer keyboard with 24 function keys (F1-F24)
- 10 QuickAccess keys (Activator Pro 80 only)
- 2 vibration sensors (left and right)
- Tone generator for beeps
- 2 USB-C ports
- 32 GB internal memory
- Multi-Bluetooth® technology (up to 3 devices)
- Dimensions Activator Pro 80 (W x H x D):
    - 22.28 inch (56.6 cm) x 0.75 inch (1.9 cm) x 9.33 inch (23.7 cm)
- Dimensions Activator Pro 64 (W x H x D):
    - 20.11 inch (51.1 cm) x 0.75 inch (1.9 cm) x 9.33 inch (23.7 cm)
- Keyboard height: 0.15 inch (0.4 cm)
- Weight Activator Pro 80: 7 lb (3.2 kg)
- Weight Activator Pro 64: 6.3 lb (2.9 kg)

3 Start Up

3.1 Version Information

As of this section, all common characteristics of the Activator Pro will be described. This information applies from firmware Version 1.6 of your Activator Pro.

3.2 Turning the Power On

As soon as the Activator Pro is powered, it turns on automatically. The on/off button on the left side of the device allows you to turn it off and on manually. A vibration signals readiness and the startup message appears on the Braille display:

'Help Tech Activator Pro 80' or

'Help Tech Activator Pro 64'

The Activator Pro is preset so that it can be used to operate the PC at the left USB port immediately after switching it on. If you switch to menu mode with the left special key, the detailed startup message appears:

'Help Tech Activator Pro 80 F1.0 SBFri02.08.24 09:49 ?'

- The name of the device "Help Tech Activator Pro 80 or 64" (cells 1-26)
- The firmware version (cells 28-31) e.g. F1.0
- Smart phone status (cell 37): S is displayed here when an iPhone is connected via a Lightning or USB cable. If no iPhone is connected, no dot is set.
- Bluetooth Status (cell 38): This module indicates whether the Bluetooth interface is active or not, and whether there are Bluetooth connections. If the Bluetooth interface is deactivated, no dot is set. A lowercase b indicates that the Bluetooth interface is active. A capital B indicates that there is a Bluetooth connection. If dot 8 is also set, there are two Bluetooth connections. If dot 6 is also set, there are three Bluetooth connections.
- Day of the week (cells 39-41): In languages in which a two-digit abbreviation for days of the week is common, there is a period at the end; there is no period for three-digit abbreviations.
- Date (cells 42-49): Day.Month.Year
- Time (cells 51-55): The time is displayed in 24-hour format. The colon between hour and minute flashes every second.
- Retrieve Support Information (cell 64/80): Pressing the CR-key above the last module will display various information about the Activator Pro that may be useful for support requests. To return to the startup message, press [N2] or [N5].

The abbreviations in the support information have the following meaning:

- FW ("firmware"): version of the installed firmware
- SN ("serial number"):the Activator Pro's serial number
- NSRV ("next service"): month and year of the next due maintenance
- LSRV ("last service"): month and year of last maintenance
- T ("tasks"): Performed during the last maintenance

  - CPS (“caps“): caps exchanged
  - PNCLN (“pins cleaned“): Pins cleaned
  - PNRPL (“pins replaced“): pins exchanged
- LRPR (“last repair“): month and year of last repair
- DLV (“delivery“): month and year of delivery

If any of this information is not available, there is "N / A" ("not available") behind the colon.

A short vibration when switching on indicates that you are in normal working mode. If you have checked the **action Confirmations** setting in the **Options** menu under **Tone signals**, a startup melody will also sound when you switch on.

You are now in the main menu of the Activator Pro, where you can activate the various functions.

If you get a message starting with **'FER:', 'Warning'** or **'WRN:'** instead of the startup message shown above, the internal software has become corrupted. Detailed information and a workaround can be found in chapter 12 Error Messages.

Before you begin, we would like to briefly familiarize you with some basic concepts of the Activator Pro.

3.3 Basic Operation

3.3.1 Switching between connected devices

To switch between the different channels, i.e. also between different connected devices, press the left of the three special keys located in the top row of the keyboard.

Order starting from the menu mode (which is also considered a channel):

- USB device left side
- USB device right side
- After that, all Bluetooth devices will follow (the name of the Bluetooth device will be displayed or Bluetooth device with number 1 to 3)
- Finally menu mode again

When ActiveSplit is activated (see chapter 4.1.1), the left special key changes the channel for the left Braille display area and the middle special key changes the channel for the right Braille display area.

3.3.2 Braille input and Chord Commands

The letter keys in the initial position a s d f j k l ; can also be used for Braille input. To emphasize this, they are blue instead of gray. In addition, f and j are tactilely marked. The space bar can then also be used for chord commands.

The following applies to Braille input:

f = dot 1
d = dot 2
s = dot 3
a= dot 7
j = dot 4

k = dot 5
l = dot 6
; = dot 8

To turn Braille input on and off, press the {Braille} key in the top row on the far right, above the pause key.

We have introduced so-called chord commands to make available functions that require their own keys on standard keyboards, but also for reasons of efficient operation. These are letters or Braille dots that are pressed in combination with the space bar. For example, you can exit the editor with Chord e [SPC + 1 5]. If changes have been made, the editor asks whether they should be saved.

For chord combinations, it is sufficient to release one of the pressed keys to trigger the function. To enter letters, all keys must be released, then the letter will be triggered.

To enter a single Braille dot pattern or chord command, you can also hold the {Fn} key, and then type the Braille dot pattern or chord command as if Braille input was enabled. For Chord e, press {Fn + Space + f + k}, where f is dot 1 and k is dot 5.

A list of all available key combinations can be found in chapter 11.

3.3.3 One hand mode

For the rather small group of Braille readers, who can only operate the Braille display with one hand, we have developed the **One hand mode**. The **One hand mode** is started by holding down the navigation key [N2] (center left) when switching on. This can be done comfortably with one hand.

If you want to activate the one-handed mode permanently, set this in the options menu (see chapter 5.2.10.7).

Regardless of whether you use your left or right hand to enter Braille, you can get started right away.

When typing, the left half of the Braille character is entered first and then the right half. If one half is without dots, then the space bar (SPC) is pressed for it. To enter a space, the space bar is pressed twice.

For example, if you want to enter a p with your left hand, press the Braille dots 1+2+3 followed by 1.

A special feature of our one-handed Braille input is the quick entry of characters, which can also be reached with one hand by pressing the keys on both sides of the Braille keyboard directly. These inputs are recognized as complete entries of the letter. This is practical e.g. for c e i. For example, you can enter an e directly by pressing 1+5 or on the left side by 1 followed by 2 or on the right side by 4 followed by 5.

That sounds much more complicated than it is. Just try it out.

To enter chord commands, the space bar is held as you type. The quick entry is particularly practical here, e.g. to end a note with Chord e.

Even when entering Braille with JAWS and NVDA, our **One hand mode** can be used.

3.3.4 Signal Tones

The Activator Pro utilizes various signal tones to indicate its status or to alert you about prompts or possible errors.

1. Start-up sound: This is a tone signal which sounds during start-up. When the start-up sound is preceded by a very short, high tone followed by a pause, then the Activator Pro is in work mode.
2. Warning signal: This consists of a simple short sound and may sound, for example, when you have reached the beginning or the end of a text in the Editor or when you are cancelling a search.
3. Error signal: These are three consecutive signals with an ascending tone pitch, which may be emitted, for example, before you delete a file.

Note: You can specify which types of acoustic signals you want the Activator Pro to emit (see chapter 5.2.10.10).

3.3.5 System Messages

The Activator Pro will display messages to indicate the successful completion of an operation or to alert you about possible operating errors. If it is an error message, or in other important cases, the messages are accompanied by a signal tone and/or vibration. The signal sounds and vibrations can be switched off in the **Options** menu (see chapter 5.2.10.10 Tone signals and 5.2.10.11 Vibration).

We recommend you to carefully review these messages before continuing with your work. They frequently contain instructions on how to proceed.

Most error messages will be in the selected language however, there are some system messages that are only provided in English. Regarding these messages, all messages beginning with **'fatal'**, **'fer:'**, **'error'** or **'wrn:'** should be attended to.

After you have read the message, you can exit by pressing [N2] which in most cases will return you to the place from which the message was initiated. If the message text does not fit on the Braille display, you can scroll through it by pressing the [N1/N4] and [N3/N6] keys.

In chapter 12 you will find a list of the most important messages with explanations.

3.3.6 Checkboxes

Checkboxes are switches that can be in either an "on" or "off" state. A checkbox consists of a symbol indicating its state and a designation. The symbol "[X]" indicates that the checkbox is "on" or active, whereas "[ ]" is an inactive or "off" checkbox.

Toggling the state of the checkbox between on and off is accomplished by pressing [SPC] or [N5]: the state is toggled upon each keystroke. Alternatively, you can also press the cursor routing key above the checkbox to toggle it. As soon as you move on to a new menu item, the last state indicated by the checkbox remains in force. However, the settings are not permanently saved until the **Options** menu is closed.

Checkboxes are used to control your Activator Pro's functions and can be found in the **Options** menu. For example, you can choose either 6-dot or 8-dot Braille with this method.

3.3.7 Radio Buttons (1 of x)

Radio buttons are similar to incremental dials, e.g. from 0 to 10. They are groups of buttons that can be set to either an on or off state, of which only one can be selected at any given time.

A radio button consists of a symbol indicating its state and a designation. The symbol "(X)" indicates that the button is active, whereas "( )" represents an inactive or "off" button. A radio button is selected by pressing [SPC] or [N5]. Alternatively, you can also press the cursor

routing key above the radio button to toggle it. An example is the frequency setting for acoustic alerts, which can be set to one of several levels.

3.3.8 System files

The Activator Pro's firmware requires its own files to keep track of settings and for saving new information. These system files always have the extension "HSF" (Help Tech System File) and will be saved in the HTSYS folder and its subfolder LANGUAGE. Some examples of system files are the message file (English.HSF) and the layout file for the Computer keyboard (English_KBDLYOUT.HSF).

By default, system files are not displayed. However, displaying this system files can be activated via the **Options** menu (see chapter 5.2.10.4 show sYstem files).

3.3.9 staNdby

If no key is pressed or the Braille display is changed on the Activator Pro for a certain period of time, it is put into a so-called "sleep mode" (standby). The Braille cells are switched off to protect them when they are inactive. However, the keyboard remains fully functional. After pressing any key, the Activator Pro is immediately fully operational again. You can tell by the fact that the stylus pins of the Braille cells are replaced. The Activator Pro can also be woken up from standby mode by pressing the on/off button.

You can set the period of time after which the Activator Pro should switch to standby mode in the options menu. For more information, see chapter 5.2.10.16 staNdby.

3.3.10 The SAFE Mode

In SAFE mode, the Activator Pro can only be operated as a Braille display. SAFE mode is comparable to the safe mode in Windows. To access SAFE mode, press and hold the on/off button for more than five seconds.

Two short vibration signals will be emitted and the following start-up message will be displayed:

'Help Tech ACTIVATOR PRO 80 Safe Mode 1.0' or

'Help Tech ACTIVATOR PRO 64 Safe Mode 1.0'

The number at the end indicates which version of Safe Mode it is. To return to normal operating mode, turn the Activator Pro off and on again.

4 Quick Start

4.1 The Activator Pro as a Braille Display

To work under Windows operating systems, a so-called screen reader program is required to control the Braille display, which is not included in the scope of delivery. To use the Activator Pro as a Braille display, connect the left USB-C port to a USB port on your PC. If you are using the Bluetooth wireless interface, make sure that the Activator Pro is powered by the left USB-C port.

As soon as the Activator Pro is powered by the left USB port, it turns on automatically.

By default, the screen reader displays the selected position of the active window on the Braille display. For example, when you move through a menu, the selected menu item is displayed. You can use the [N1/N4] and [N3/N6] reading keys to move through texts. The [CR] keys can be used to place the writing mark in word processing programs, such as Microsoft Word. In addition, the [CR] keys can also be used to activate menu items or trigger functions (e.g. in the case of a yes/no query '... y/n', the [CR] key above the "y" triggers the same function as when you type [y]).

Screen readers convert the text and graphics of the Windows screen into speech and Braille. The computer's built-in speakers are typically used for voice output. The Braille display works by having the screen reader transfer the information to be shown directly to the Braille device. All common screen readers can work with the Help Tech Braille displays. When installing the screen reader, it is sufficient to select Help Tech or Handy Tech. The Braille output automatically adjusts correctly to your Activator Pro.

When starting JAWS for the first time, a small display window appears in which the name of the Braille display found with the interface used and the JAWS driver version is displayed. The various functions of the screen reader can be assigned to the individual keys of your Activator Pro.

The operation of your Activator Pro as a Braille display under Windows with JAWS is described in chapter 7.2. VoiceOver users can find a summary of the most important operating functions in Chapter 7.3.

4.1.1 ActiveSplit

The idea of ActiveSplit is to be able to operate two independent computer systems at the same time with a Braille display divided into two segments. With two USB-C ports – e.g. left to the PC and right to the smartphone or tablet - and up to 3 Bluetooth connections, the Activator Pro offers many possible combinations.

To activate ActiveSplit, press the middle of the three special keys located in the top row of the keyboard.

After activating ActiveSplit, the Braille display is split at position 49. We call the separating Braille cell at position 49 a divider. Both Braille ranges behave like two separate Braille displays. On the left as a 48 Braille display and on the right as a 31 (Activator Pro 80) or 15 (Activator Pro 64) Braille display. Thanks to the intelligent control, JAWS, NVDA and VoiceOver dynamically adapt to the respective Braille display length, and thanks to BrailleHID, this also applies to iPhones and iPads connected via USB. The left navigation keys [N1], [N2] and [N3] are used to operate the left Braille segment – and the right navigation keys [N4], [N5] and [N6] are used to operate the right Braille segment.

The last reading position, determined via ATC, assigns the keyboard and other controls to the last Braille range read. If the controls are assigned to the left area, the divider symbol on the Braille display (an arrow) points to the left with the dots 2, 3, 4, 8, and if the right side is assigned, the divider shows the dots 1, 5, 6, 7. This assignment can also be changed by pressing a [CR] key above the respective Braille segment.

The [CR] key of the divider can be used to dynamically reposition it. To do this, press the [CR] key above the divider and immediately afterwards press the [CR] key of the new desired divider position. Immediately, the layout of the Braille areas changes.

To exit ActiveSplit, either press the left special key for more than two seconds, in which case the left area will take up the entire Braille display length. Or you can press the middle special key for more than two seconds, in which case the right area takes over the entire Braille display length. ActiveSplit also terminates automatically if a Bluetooth device is selected for one of the two segments and the connection to it is lost. In such a case, the opposite area takes over the entire Braille display length.

To swap the right and left Braille line areas, press the two special keys (left and center) together. The divider remains in its position, i.e. the length of the areas remains the same, only the contents are swapped.

Important: To switch to internal menu mode, ActiveSplit must be disabled.

4.1.2 BrailleShot

At BrailleShot, we were inspired by screenshots, as a frequently used way to quickly save a displayed piece of information. The idea of BrailleShot is to be able to quickly save interesting information displayed by any system on the Braille display. For example, BrailleShot can be used to store a phone number or text sections internally in the Activator Pro. In the BrailleShot folder, the information is stored as a file with date and time, and is also stored on the clipboard.

Press [QA3] or {Fn+3} to activate the BrailleShot function. Everything you read on the Braille display from now on will be saved. Press [QA3] or {Fn+3} again to stop recording.

The information stored on the clipboard can be edited and copied using the internal editor. To transfer this internal information to connected systems, you can use DirektTransfer by pressing [QA4].

An example to illustrate better: From the homepage of your favorite pizzeria, you can use BrailleShot to cache the phone number in order to send it directly to the iPhone with DirektTransfer and call there.

Since the information from the last BrailleShot is also stored on the clipboard, transferring short strings to another system is very easy. Use BrailleShot to cache an info, then switch to the iPhone and transfer the info with [QA4].

4.2 The Activator as a note-taking device

The internal menu mode allows you to use the Activator Pro as a note-taking device. To switch to internal menu mode, press the left special key until menu mode appears. You can also press [QA1] or {Fn+1}.

4.2.1 Navigating the Menu

Use the [N1/N4] and [N3/N6] keys to move through the menu. With [N5] or the [CR] keys, you activate functions or open submenus, which you can recognize by the larger sign at the end of the entry. With [N2] you leave functions and submenus. With {Ctrl + Home} or {Ctrl + End} you get to the first or last menu item of a menu level. At the very top menu level, you will find a menu item called "Menu". If you select it, you will be taken to the first entry in the menu.

A detailed description of the individual menu items can be found in chapter 5.2.

4.2.2 Context sensitive help

Pressing the Cursor Routing key above the question mark at the end of the Braille display opens the respective manual chapter as read only file in the Editor. As usual, the help text can be closed by [N2] or by pressing {Ctrl + e} or {Alt + F4} on the computer keyboard. These help texts are available for most system languages. If not, the English text will be displayed.

4.2.3 Writing a Note

To create a new file, press [N5] when the **'Editor'** menu item appears. After that, **'New'** appears. Now, pressing [N5] will open a new file. The cursor, represented by the flashing dots 7 and 8, appears on the first Braille cell. Now you can start writing. If you make a spelling mistake, you can use {Backspace} to go back one character. You can use the cursor routing keys to place the cursor in a targeted manner.

{Delete} deletes the character at the cursor position. {Insert} can be used to switch back and forth between insert and overwrite modes. A low beep indicates that the overwrite mode is active, while a high beep indicates the insert mode. Also, the cursor is represented in overwrite mode by a flashing full shape (all 8 dots).

With the reading keys [N3/N6] for forward and [N1/N4] for back, you can read the text that has already been written without moving the cursor. If you want to return to the cursor position, simply press the [N2] key. Conversely, the cursor can also be moved to the reading position using the cursor routing keys.

Further editing functions such as search and replace are described in Chapter 5.3.

4.2.4 Saving a Note

Following are your options for saving a note:

1. To save the current status without closing the file:
   - Enter {Ctrl + s}. The message **'Save file: '** appears, followed by the default file name. The Editor suggests an appropriate filename for unnamed files based on the first 20 characters of the first line. The cursor is positioned on the first character of the file name.
   - You may either accept the default file name, overwrite it by entering a name of your choice or edit the name easily by navigating the cursor and using the delete function. If you enter any character without first moving the cursor, the default file name will be overwritten.
   - To save the file, press the [N5] key. If a file with that name exists already, you will be notified and can then overwrite that file.
2. To save the current file and then close it:

- Enter {Ctrl + e}. The procedure for saving the file is the same as the steps described above in 1.
- When the file has been saved, it is also closed. Unless you have other files open, you will return to the main menu at menu item **'Editor'**.

4.2.5 Opening a File

To open the last previously closed file, activate the menu item **'Previous file'** in the **'Editor'** menu. This will open the most recently closed file, with the cursor at the position it was in when the file was closed.

To open another existing file, continue navigating through the **'Editor'** menu beyond the items **'New'** and **'Previous file'**. A list of files in alphabetical order will be compiled and displayed.

Select the desired file using [N1/N4] and [N3/N6] and then press [N5]. You can then choose either **'Edit ctrl+o'**, **'View ctrl+w'**, **'cUt ctrl+x', 'Copy ctrl+c' 'Delete ctrl+d', 'Rename ctrl+r'** or **'show file attriButes'**. If you select **'Edit ctrl+o'**, the file will be opened in the Editor.

4.2.6 Transferring data between the Activator Pro and a PC

The Activator Pro offers three different options for file transfer:

1) via the file transfer program HTCom {Ctrl+Alt+h}.
2) via the function **"Mass storage"** in the main menu of the Activator Pro, whereby the Activator Pro is treated like a drive by the PC (see chapter 5.2.7 Mass storage).
3) via the patented function "DirektTransfer" directly from the editor of the Activator Pro into an input field of a connected device. (see chapter 5.3.20 DirektTransfer of files or blocks of text to a connected device).

In general, we recommend using the HTCom program as it transfers different file formats into a format which can be read by the Activator Pro. Additionally, HTCom offers a contracted Braille translation and back translation. If you copy, for example, a word document in the docx format using the Windows Explorer to the Activator Pro, it cannot be opened by the Activator Pro. If you transfer this document using HTCom, the textual information will be transferred and be stored with the same name. This document can be read and further edited with the internal Editor of the Activator Pro.

4.2.6.1 The file transfer program HTCom

With the transfer program HTCom from version 3.4.1.0 you can transfer texts, message files and Braille character sets into the Activator Pro. It has the task of transferring files from a PC to the Activator Pro via the USB port. In addition, you can also use HTCom to send files from the Activator Pro to the PC in reverse.

Various file formats can be transferred to the Activator Pro with HTCom. When transferring files, HTCom extracts the text information from the following formats:

- Word format *.doc and *.docx
- HTML format *.htm, *.html, *.php, *.php3, *.asp and *.jsp (Internet)
- Text format *.txt, *.java, *.ini, *.hpp, *.h, *.cpp, *.c
- RTF format *.rtf (Rich Text Format)

Optionally, the text information can be converted into contracted Braille during the transfer operation. Files in formats other than those shown above (such as *.exe files) are transferred unchanged to the Activator Pro. The Activator Pro can thus be used to store data. However, note that transferring large files to and from the Activator Pro takes much longer than transferring to and from a memory stick.

HTCom runs under the operating systems WINDOWS 8 / 8.1 / 10 and 11.

Important: The Activator Pro is only supported from HTCom version 3.4.1.0. If you use an older version of HTCom, please use the StartStick to update.

Please read the detailed manual for data transfer between Braille display and PC, which can be found on the StartStick. Below you will find a short description of data transfer with HTCom.

4.2.6.2 Transferring a File using HTCom from the Activator Pro to the PC

Start up the HTCom program on your PC then select the menu item "Receive file" using the tab key or the arrow keys, followed by the Enter key.

The PC will show all the files on your Activator Pro. You can select one or more files to transfer. Use the tab key to move to the input field that allows you to specify where the transmitted files should be stored. Once you confirm this dialog by clicking OK the transfer will start. During the file transfer, the Activator Pro displays the following:

'**Transmitted m of n bytes**',

where m represents the number of bytes already transmitted, n the size of the entire file. Once all the files have been transferred to the PC, you can close HTCom.

4.2.6.3 Transferring a File using HTCom from the PC to the Activator Pro

Start the HTCom program on your PC. Select the menu item "Send file" using the tab key or the arrow keys, then press the Enter key. A dialog for choosing the files you want to transfer opens. After you selected the file you wish to transfer, press the Enter key. Now another dialog opens, and you can specify any desired conversion into grade two Braille. By pressing Enter, the file will be transferred.

When the file transfer is complete, you will be again in HTCom's main menu. The transferred files will be found under the **'Editor'** menu on the Activator Pro. You can now open it from here as described above and continue to edit.

4.3 The Activator Pro in combination with the iPhone

When you connect your iPhone to the Activator Pro, as described in Chapter 2.5 Connecting iPhone to Activator Pro via USB, you can use many features of the iPhone in combination with the Activator Pro that are not available with a simple Bluetooth connection. An important prerequisite for this is the installation of the HelpTech+ app from the Apple App Store.

4.3.1 The HelpTech+ app

Together with our specially developed iOS app HelpTech+, the Activator Pro is enhanced with additional functions and smart services, such as a Braille monitor which allows a sighted person to follow the information displayed on the Braille display directly on the iPhone screen or the voice input service that allows you to dictate texts into the Activator Pro.

To use the HelpTech+ app, the iPhone must be connected to the Activator Pro via a cable. HelpTech+ cannot be used via a Bluetooth connection between the Activator Pro and iPhone.

4.3.1.1 Braille Monitor

The Braille monitor integrated in HelpTech+ enables a sighted person to follow the information displayed on the Braille display directly on the iPhone screen. Even if the text is displayed in contracted Braille on the Braille display, it appears uncontracted the app's Braille monitor.

The Activator Pro automatically switches to internal menu mode as soon as the Braille monitor is activated and shows the Braille output of the Activator Pro in plain text on the iPhone's display. The text output in the Braille monitor is displayed in real time. If you navigate in the Activator Pro or edit documents, these changes are also updated in the Braille monitor without delay.

The current reading position or the position of the reading finger is highlighted in color in the Braille monitor. When editing text in Activator Pro, this also applies to the cursor position and markers in the text.

If you're having trouble reading the text on the iPhone's Braille monitor, you can switch between different high-contrast color schemes. To do this, tap the screen four times when VoiceOver is enabled. If VoiceOver is off, simply double-tap the display to change the color contrast.

4.3.1.2 Voice recording

With HelpTech+ voice recording, you can dictate texts via the iPhone's microphone instead of having to type them into the Activator Pro yourself.

To do this, open the menu item "Start Voice Recording" (VoiceOver says "Double tap to start or stop voice recording") in the "HelpTech+" main menu. The first time you use voice recording, you must allow "HelpTech+" to access the iPhone's microphone.

After starting the voice recording, you can dictate the text to be transmitted to the iPhone. Speak clearly, but at a normal volume. You also don't need to lean closer to the iPhone's microphone.

After you have finished speaking the text, double tap the iPhone screen or press {Up Arrow + Down Arrow}. The voice recording will now stop.

"HelpTech+" will now ask if you want to transfer the recognized text to the iPhone. If you agree, the recognized text will be transferred to the Activator Pro as a new text file However, you also have the option of inserting the recognized text at a specific point in an existing text file. To do this, simply open the desired text file in the Activator Pro before starting the voice recording and place the cursor at the position where the recognized text is to be inserted.

4.3.1.3 Smart Services

Advanced functions are available with the HelpTech+ app. Complex tasks are performed by the iPhone for the Activator Pro with HelpTech+. The results are displayed in HelpTech+ optimized for the Activator Pro. You can use this service in combination with VoiceOver.

These Smart Services for the Activator Pro are continuously being expanded. Therefore, we recommend to always use HelpTech+ in the current version. As soon as a new version is available in the App Store, you will be informed about it, as with other apps.

In this manual, we cannot go into detail about the Smart Services. In the following, a smart service is described using the example of "News".

With the smart menu item "News" you have access to the latest news. Almost all daily newspapers and news portals offer an automatic news service as RSS feed. In the English version, „The Guardian“, „The New York Times“ or „The Washington Post“ has been integrated for you by default.

In News you will find a list of headlines of the current news. Each headline is displayed in a long line, in which you can navigate like in a text. At the end of the headline, the next headline starts in a new line.

You can also navigate line by line with [SPCL] and [SPCR]. The Braille display is always set to the beginning of the line when navigating line by line.

Press [N5] or {Enter} to select an article to read. The corresponding text is opened in text view with the Internet access of your iPhone.

After reading the text, press [N2] or {ESC} to return to the headline list. The Braille display then shows the beginning of the line of the last read heading.

As usual you return to the main menu with [N2] or {ESC}.

4.3.1.4 Transferring Files between Activator Pro and iPhone

1. Connect the Activator Pro to the iPhone (using the optional Lightning adapter if necessary) and open the "HelpTech+" app on the iPhone.
2. Open the "File Manager" menu item in the app.
3. You can choose to copy a file from iPhone to Activator Pro or from Activator Pro to iPhone.
4. Apple's "Files" app will open in a window. This is pre-installed on every iPhone. From there, select the file you want to copy.
5. After selecting the file, HelpTech+ will automatically start the copying process. You can cancel it at any time. Do not disconnect the Activator Pro from the iPhone during the copying process.
6. Once the copying process is successfully completed, you will be informed about it. You can now directly select another file to copy or return to the main menu of HelpTech+.

4.3.2 Creating, editing and saving Word files

Open the Microsoft Word app. This can be installed free of charge on the iPhone via Apple's App Store. If you don't have a Microsoft account, you can use any other word processing app that supports the doc or docx file format.

Open either an existing file or a new document. After selecting new document, the focus is directly in the text box where you can type your text.

You can also format text in the Word app. To do this, select the desired text with the Shift key held down and {arrow left} or {arrow right}. {Ctrl + b} will make the text bold. {Ctrl + u} underlines the text and {Ctrl + i} italicizes the text.

To close the file and save the changes, press the left and right arrow keys at the same time to activate VoiceOver quick navigation.

Use {arrow left } to move the focus of VoiceOver to the "Close File" button in the menu bar and activate it by pressing {arrow up + arrow down} at the same time.

The iPhone will ask if you want to save the changes to the document. If you select "save" with {arrow right}, you have the option of entering the desired file name and specifying a storage location.

5 Operation of the Activator Pro

5.1 The 10 QuickAccess keys

The 10 QuickAccess keys [QA1] to [QA10] to the right of the Activator Pro 80's computer keyboard are designed to assign functions to it according to your individual needs. A total of 27 functions can be assigned to each of the 10 [QA] keys. On the Activator Pro 64, press {Fn} and a number key to enter the function of the corresponding [QA] key. The number keys in combination with {Fn} are equivalent to the [QA] keys.

The function of a [QA] key is performed when you press and release the respective key briefly. If a beep is then heard, the function with which the respective [QA] key is assigned cannot be executed in the current context.

Pressing and holding a [QA] key for two seconds opens the configuration menu, where the function for the respective key can be selected. The Activator Pro confirms this with a vibration signal. On the Activator Pro 64, hold down {Fn + digit} for two seconds. The Activator Pro automatically switches to internal menu mode to configure the [QA] keys. It is not possible to open the configuration menu as long as a message is displayed expecting or confirming a response (Yes/No/Cancel). In this case, a beep indicates that the configuration menu cannot be opened.

The configuration menu allows you to move around the menu system as usual. With {Esc} or [N2] you leave the menu without saving your selection. Pressing {Enter} or [N5] will save your selection and close the configuration menu. The entries in the menu each start with "QAx:", where x stands for the number of the key that is currently being configured.

The same function can be assigned to any number of keys. In the configuration menu of the [QA] keys, a list of keys to which the respective function is already assigned is therefore displayed after each entry. For example, "[QA1, QA2, QA10]" means that the corresponding function is already assigned to [QA] keys 1, 2, and 10.

These are the functions implemented so far in order in the configuration menu:

1. **Home:** Leave the current context and return to the internal menu, first menu item (see chapter 5.2.1 Menu).
2. **Show date and time:** Displays the current date and time on the Braille display. Please note that the display is not updated, i.e. the clock does not continue to run.
3. **BrailleShot:** Enables or disables BrailleShot.
4. **Send clipboard:** Sends the contents of the clipboard to the currently selected device using keyboard emulation.
5. **Mass storage:** Switches to mass storage mode or back to internal menu mode.
6. **Grade II translation:** Toggles Grade 2 translation on/off. This function affects the editor if it is open, otherwise it affects the menus.
7. **Open new file in editor:** Opens a new file in the editor. If the editor is already open, it will close and restart. This is only possible if there are no unsaved changes in the editor.
8. **Open previous file in editor:** Opens the last opened file in the editor. If the editor is already open, it will close and restart. This is only possible if there are no unsaved changes in the editor.

9. **Launch Safari on iOS device:** Activates the device on the right USB port and sends the command to open Safari using keyboard emulation.
10. **Launch Mail on iOS device:** Activates the device on the right USB port and sends the command to open Mail using keyboard emulation.
11. **Bluetooth:** Toggles Bluetooth on/off. It is also possible to turn Bluetooth back on if it has been automatically turned off due to inactivity.
12. **6 dots Braille:** Toggles 6/8-dot Braille. This setting only affects the internal menu mode.
13. **Change system language:** Displays the menu for selecting the system language.
14. **Configure Braille character set:** Displays the menu for selecting the Braille character set.
15. **Restore factory default:** Resets all options to factory defaults. You will need to confirm the reset first.
16. **Hangman:** Opens the game **Hangman**.
17. **Braille Hunt:** Opens the game **Braille Hunt**.
18. **Show user manual:** Opens the manual in the editor. If the editor is already open, it will close and restart. This is only possible if there are no unsaved changes in the editor.
19. **Internal mode:** Switches to internal menu mode.
20. **Left USB port:** Switches to the device at the left USB port. ActiveSplit is automatically disabled if it is active.
21. **Right USB port:** Switches to the device at the right USB port. ActiveSplit is automatically disabled if it is active.
22. **Close editor:** Closes the editor. This is only possible if there are no unsaved changes in a named file in the editor.
23. **Braille Dialog:** Toggles **Braille Chat** on/off.
24. **Configure sound signals:** Displays the menu for configuring the **Tone signals**.
25. **Configure vibration signals:** Displays the menu for configuring the **Vibration**.
26. **ATC:** Toggles ATC on/off in the editor when it is open. While controlling a PC, the JAWS key combination is sent to the active device, which turns ATC on or off.
27. **Record macro:** Allows you to record key sequences that can then be assigned as macros to individual [QA] keys. Multiple [QA] keys can each be assigned different macros. For more information, see chapter 5.1.1.

In the default assignment, the [QA] keys are mapped according to their order to functions 1 through 10.

5.1.1 Recording a macro

You can assign different macros to [QA] keys. The following is a step-by-step explanation of how to record a macro and assign it to a [QA] key.

1. Press and hold the [QA] key to which you want to assign a macro for approx. 2 seconds.
2. The configuration menu opens with the 27 functions described above. Select the 27th menu item labelled **‘QAx: Record macro’.** Confirm this menu item with Enter.

3. The [QA] key is now ready for macro recording, but does not start recording yet. The Braille display shows: **'Press QAx at any time to start recording, and again when done.'** where x stands for the number of the [QA] key. You can navigate to the exact point where you want the recording to start. It is also possible to change the mode (left USB, right USB, etc.).
4. When the cursor is exactly where you want the recording to start, press the [QA] key to start recording. The start of recording is confirmed by an ascending tone sequence and a vibration signal.
5. All keystrokes – including Braille keys (SPCL and SPCR, if Braille input keys are activated) – are now recorded. Each key or key combination pressed is confirmed by a short tone and a short vibration signal.
6. Pressing the [QA] key again ends the recording. The end of the recording is confirmed by a descending tone sequence and a vibration signal.
7. After the recording is finished, the recorded macro is triggered or repeated by briefly pressing the corresponding [QA] key.
8. Pressing and holding the [QA] key again (approx. 2 seconds) opens the familiar configuration menu again. Here, you can either record a new macro or select one of the 26 other functions.

Notes: [QA] keys are deactivated during recording (a macro cannot execute another macro or trigger one of the 27 predefined QA functions).

Some windows take a moment to open after confirmation (e.g. with Enter). If macro commands are already being sent during this time, they may be 'swallowed' by Windows. Therefore, insert pauses in the macro recording if necessary. A pause is inserted using the Pause key or by pressing and holding the [QAx] key and lasts 1 second. Multiple pauses can be combined (e.g. 3× pause = 3 s).

If the device is switched off or restarted for any reason during macro recording, the macro recording is stopped and the keys recorded up to this point are not saved. No incompletely recorded macro is accepted by the system. Only macro recordings that have been terminated by pressing the [QA] key are saved (see step 6 above).

5.2 The Internal Menu

The internal menu system is structured hierarchically, containing submenus and functions.

In addition to the keys described in chapter 11, there are also shortcut keys, known as "hotkeys." These grant direct access to menu items within a menu level, without having to navigate clumsily through the entire menu with [N1/N4] and [N3/N6]. A hotkey is one letter of the menu item. It is spelled as a capital letter, but it may also have additional emphasis added. Not only submenus, but functions and checkboxes as well may be activated using hotkeys. Furthermore, you can configure your Activator Pro such that these objects are not only selected, but also activated by pressing the hotkey.

By pressing {Ctrl+g} you can switch the menu of the Activator Pro from uncontracted Braille to contracted Braille and back at any time.

In the following sections, the menu items as well as their sub-items are described in detail, with the hotkeys enclosed in round brackets. If there is no letter indicated within brackets, then there is currently no hotkey available for that menu item.

Note: The hotkeys allow you to quickly access objects on the same menu level, but not to jump between different menu levels. So you can't go directly from the **Editor** to the **Games**, but you have to return to the main menu first, from where you can then use the hotkeys to move through the menu levels to the **Games**.

5.2.1 menu

If you press the escape key [N2] anywhere in the main menu between **"Editor"** and **"Options"**, you will reach the first menu item. At the end of the Braille display is the information that is also displayed in the start message (see Chapter 3.2 Turning the Power On).

5.2.2 Editor

In the **Editor** menu you can create files and folders, select them and open, edit, read, rename, copy, move or delete them. In addition, you can also translate and back-translate entire text files from uncontracted Braille to contracted Braille. A detailed description of the editor can be found in Chapter 5.3.

In order to copy, move or delete objects, you can also select more than one object. Press {Insert}, the selected object will be marked with dot 7 and 8. To unmark an object, press, {Insert} again. To mark all files and folders in the current folder, press {Ctrl+a}.

5.2.2.1 Contracted Braille translation and back translation

To translate a complete text file into contracted Braille, select a text file in the editor's file list (see Chapter 5.2.2.5 File and Folder list), but do not open it.

When the focus of the Braille display is on the file name, press {Ctrl+g}. The Activator Pro now translates the entire file into contracted Braille. To do this, the Activator Pro creates a new file with the same name, but with the file extension BRL. The completion of the translation is acknowledged by a beep.

After the contracted Braille translation is complete, you can open the BRL file. The original text file will be preserved.

The reverse translation from contracted Braille to uncontracted Braille works in the same way. To do this, select a BRL file in the editor's file list and press {Ctrl + g}. The Activator Pro will now create a new text file with the content retranslated to uncontracted Braille.

Also in this case, the content of the original BRL file is preserved.

The translation and back translation is very fast. Only in case of very large text files the translation process may take a few seconds. During a running translation, pay attention to the notes of the Activator Pro.

You can perform the contracted Braille translation or the back translation in the selection menu of the file list. For this you can use the menu items

- Transl. to contracted Braille ctrl+g

- Transl. to uncontracted Braille ctrl+g

After translating the file, it will be opened directly.

5.2.2.2 New

This menu item creates a new file. The file will be empty and can be edited. The cursor is located at the first Braille position.

5.2.2.3 Previous file

This command opens the last file that was closed by the Editor. After opening the file, the cursor will appear at the same position it was in when the file was closed. The file automatically opens in the same editing mode in which it was saved.

Note: This menu item is dynamic and will appear only if you have already edited a file in the Editor and saved it. The name of the last edited file will remain stored in your Activator Pro even when it is turned off.

5.2.2.4 New directory

Using "**New directory**" you can create folders. You have the opportunity to store your documents into different folders to make it easier to find them again. After calling **New directory**, Activator Pro proposes "**untitled**" which you can overwrite. A folder name cannot be longer than 255 characters and may not contain any special characters (:*?"<>|+,;=[]/\). The entire path of the folder including its name may not be longer than 259 characters. A folder is marked with a trailing slash.

5.2.2.5 File and Folder list

If you move beyond the menu item **'Open ctrl+o'**, a list of the existing files and folders will be displayed in alphabetical order. First the folders, then the files are listed. You can change this setting in the options (see chapter 5.2.10.5 fOlders first). You can recognize a folder by the trailing slash. Files usually end in a three-character suffix which is separated by a dot from the file name, e.g. "name.txt".

Selecting a file or folder with [N5] or {Enter} opens the context menu of the file list:

- **Edit ctrl+o**
- **Transl. to contracted Braille ctrl+g**
- **Transl. to uncontracted Braille ctrl+g**
- **Open ctrl+o**
- **View ctrl+w**
- **cUt ctrl+x**
- **Copy ctrl+c**
- **Paste ctrl+v**
- **Delete ctrl+d**
- **Rename ctrl+r**
- **Properties ctrl+p**

The shortcuts listed in the context menu allow you to execute the respective function directly in the file and folder list. If you want to open a txt file in Grade 2, you can simply type {Ctrl + g} directly. The txt file is translated into Grade 2 by Activator Pro and opened directly.

By pressing {End} you move directly to the end of the file list. With {Home} you can also move directly to the first object (file or folder) within the list. With [SPC + N1] or {Ctrl+Arrow up} you reach the first folder, if the option „**fOlders first**" is set to on. Otherwise, you get the

first file. With [SPC + N3] or {Ctrl+Arrow down} you reach the last file, if the option „**fOlders first**“ is set to on. Otherwise, you get the last folder.

If you are within a folder, all 8 dots of the first Braille character on the Braille display are set. A full character is added for each additional sublevel. Thus, you can see by the number of preceding full characters, in which sublevel you are. For going back one level, select the two dots “..” item. You can also press the [CR] key on the full Braille character to get back.

Normally, only the name of the file or folder will be displayed (short view). To see the whole path with all folders (full view) press {Ctrl+Shift+x}. In full view, you can jump to the desired level by pressing the [CR] key over the slash in the same level.

To quickly find a file or folder in the current folder, you can enter the name directly. The search will start once the first letter of the file name or word you are looking for is entered. A high signal tone indicates that the file was found, and the name will be displayed. The more characters you enter the more precise is the search. Once the file or folder name appears the file is selected. It is not necessary to enter more characters. With {backspace} you can delete entered characters.

If no file is found with the characters entered so far, an alert will sound. Warning and confirmation signals depend on the setting for signal tones (see chapter 5.2.10.10 Tone signals).

If no file is stored in the current folder, a message **'No files stored on disk!'** appears. By pressing [N2] or {Esc} you will return to **'New directory'**.

If you select an existing file or folder by pressing [N5] or {Enter}, another menu level with the following items appears.

5.2.2.5.1 Edit ctrl+o

This menu item is only available for single files and opens the file in the Editor. The cursor is at the beginning of the file or, if the file was opened and saved before, at the position the cursor was in when the file was saved. The cursor is displayed by blinking dot 7 and 8. The file is automatically opened in insert mode. If this menu item is not available, you have either selected a folder or one or more files (recognizable at set dots 7 and 8).

5.2.2.5.2 Transl. to contracted Braille ctrl+g

Selecting this menu item translates a txt file into contracted Braille and opens it directly. Especially with extensive texts, you can speed up the tactile reading of the document considerably by translating it into contracted Braille. The version of the text translated into contracted Braille is named with the file extension *.brl. For example, the file named "My Note.brl" is created from "My Note.txt" after translation into contracted Braille. You can also edit the contracted Braille file. The original txt file remains unchanged.

5.2.2.5.3 Transl. to uncontracted Braille ctrl+g

If a file with the file extension *.brl already exists in contracted Braille, you can have the contracted Braille text translated into uncontracted Braille with this menu item. After the text has been translated, it is opened directly. The version of the contracted Braille text translated into uncontracted Braille is named with the file extension *.txt. For example, "Notes.brl" will be turned into a file named "Notes.txt" after being translated back into contracted Braille. You can also edit the uncontracted Braille file. The original brl file remains unchanged.

5.2.2.5.4 View ctrl+w

This menu item is only available for single files. This command opens the file in "**Read Only**" mode. You can recognize the **Read Only** by the non-blinking Cursor shown as dot 7 and 8. Files opened in **Read Only** cannot be modified. If you attempt to enter or delete characters, you will simply generate warning signals, supposing that the acoustic signals setting in the Activator Pro's **Options** menu is set to output warning tones. Assuming that the file is opened for the first time, the cursor is located at the beginning, if not, it will be located at the previous cursor position. You can close files in **Read Only** by pressing [N2] or {Esc}. Whenever this menu item is not available, you have either selected a folder or one or more files (recognizable at set dots 7 and 8).

5.2.2.5.5 Open ctrl+o

This menu item is only available for single folders. With this function, you open the folder and view its contents. These are marked with a leading full character. To leave the folder, select the two points which follow the full character. In a folder, you can create new files or folders and reopen the last opened file. On the occasion this menu item is not available, you have either selected a folder or one or more files (recognizable at set dots 7 and 8). However, in order to enter a folder (for example to insert files), it is mandatory that you press [SPC + N5] or {Ctrl+Enter}.

5.2.2.5.6 cUt ctrl+x

In order to move a file or folder, you can cut it and insert it into a different place. Use the menu item "**cUt ctrl+x**" or press {Ctrl+x}. All marked objects will be copied into the clipboard. Then move to the folder to the preferred location and {Ctrl+v}. The files and/or folders from the clipboard will be inserted in the desired location and removed from their original location.

5.2.2.5.7 Copy ctrl+c

To copy a file or folder, choose the menu item „**Copy ctrl+c**" or press {Ctrl+c}. All marked objects will be copied into the clipboard. Then move to the folder to the new location and press {Ctrl+v}. The files and/or folders from the clipboard will be inserted in the desired location.

5.2.2.5.8 Paste ctrl+v

If you have marked one or more files and/or folders and executed the "**cUt ctrl+x**" or "**Copy ctrl+c**" commands, you can use the "**Paste ctrl+v**" function to insert objects from the clipboard. Alternatively, you can press {Ctrl+v}. All objects from the clipboard will be copied into the current folder. These objects stay in the clipboard, until you execute "**cUt ctrl+x**" or "**Copy ctrl+c**" again. This means, you can copy objects from the clipboard to as many places as you want.

5.2.2.5.9 Delete ctrl+d

This command allows you to delete files and folders. First a message **'Sure deleting (Y/N/A)?'** appears. By entering [**y**] for yes or activating the [CR] key above the "**y**", you will delete the file or folder irrevocably; entering [**n**], [**a**] or [N2] cancels the command. An open file cannot be deleted. Alternatively, files can also be deleted by pressing the {Delete} key.

If you have marked several files and/or folders, Activator Pro will inform you about the number of objects.

Note: It is possible to display and delete system files (see chapter 5.2.10.4). However, you should only undertake this if you know exactly what you are doing. For example, if you were to delete the file (msg.hsf), you could not work on the Activator Pro until you have loaded this file again. Because of this, you will receive the following warning before you can delete any system file: '**Warning: Deleting this file can cause system instability'**

We strongly advise you not to delete any system files which could cause the malfunctioning of your Activator Pro.

5.2.2.5.10 Rename ctrl+r

The rename function allows you to rename a file or folder. This menu item is only available for single objects. If this menu item is not available, you have either selected a folder or more than one file (recognizable at set dots 7 and 8). You can also press {Ctrl+r} to rename a file or folder. Activator Pro prompts the original name, which can be edited or overwritten.

5.2.2.5.11 Properties ctrl+p

After selecting this menu item, the file's or folder's name will be displayed, followed by its size in kB and the date and time at which it was most recently accessed. If you have marked one or more objects, you get the number of marked files and folders, as well as their size. Folders and several objects have two different sizes: their actual size and the occupied space on the disk.

You can exit this display by pressing [N2] or {Esc}, which will return you to the file list.

5.2.3 iOS apps

This submenu contains a list of frequently used iOS apps. It currently contains the following entries:

- Files
- Safari
- Mail
- Word
- HelpTech+
- **Edit**

Once the Activator Pro is connected to the iPhone via cable and the iOS apps mentioned have been installed and configured on the iPhone, these iOS apps can be accessed from the submenu by pressing a cursor routing key above the respective entry or by pressing {Enter} on the computer keyboard.

The following subsections briefly discuss each iOS app.

5.2.3.1 Files

The Files app allows you to read and edit files. The files you wish to edit can be stored directly on the iOS device, on an external storage medium or in the cloud. The supported file formats – if they are not supported by iOS by default – depend on which apps you have installed on your iOS device.

Example:

If the Microsoft Word app is installed and configured on your iPhone and you open a Word document, this Word document will open in the Word app.

5.2.3.2 Safari

After selecting this entry, the Safari browser opens. You can use it to call up websites. For navigation in the Safari app, the Braille commands for a Bluetooth standard keyboard apply if you navigate with the computer keyboard.

5.2.3.3 Mail

After selecting this entry, the Mail app opens. You can use it to compose, send and receive e-mails. For navigation in the Mail app, the Braille commands for a Bluetooth standard keyboard apply if you navigate with the computer keyboard.

5.2.3.4 Word

After selecting this entry, the Word app opens. You can use it to create, save, open and edit documents in various formats. For navigation in the Word app, the Braille commands for a Bluetooth standard keyboard apply if you navigate with the computer keyboard.

5.2.3.5 HelpTech+

After selecting this entry, our specially developed iOS app HelpTech+ opens. It is under constant development (updates can be downloaded from the AppStore) and extends the Activator Pro with additional Smart Services such as an optimized message area. This will be discussed in more detail in chapter 5.2.4 Smart Services.

Please also read the chapter 4.3.1 The HelpTech+ app.

5.2.3.6 Edit

Here you can edit the list of apps to be started on the iPhone yourself. The list of apps can be edited like a file in Editor. Navigate to the end of the list and add any app in a new line. Make sure that the spelling of the new entry is exactly the same as the app name.

Your favourite app will then be included in the list of iOS apps and can then be accessed directly from the Activator Pro.

5.2.4 Smart Services

To use this submenu, the HelpTech+ app must first be opened on the iPhone. If it has not been opened yet, the following message will appear on the Activator Pro:

'Please start HelpTech+ on the iPhone!'

After opening the HelpTech+ app on the iPhone and then opening the **Smart Services** submenu, so-called dynamic menu items appear on the Activator Pro. They depend on which Smart Services are implemented in the HelpTech+ app.

Currently, one dynamic menu item appears. This is the menu item "News". After selecting this menu item with {Enter}, an optimized news area opens. Here you can access articles from newspapers and other news portals using the RSS format. The articles are sorted by categories such as "News", "Sports" or "Internet & Technology". To select a category, the Braille commands for VoiceOver are [SPC + 3 6] when Braille input is activated, or {Arrow up + Arrow down} when navigating with the computer keyboard.

After selecting the desired category, the user can navigate through the list of articles assigned to that category. To read an article, it can be opened with {Arrow up + Arrow down}. The complete article is opened in text format optimized for reading in Braille.

Users can also create their own categories and integrate other news portals. More information on this can be found in the HelpTech+ app help.

5.2.4.1.1 Braille Chat

The **Braille Chat** for communication between sighted and deafblind people only works in combination with the HelpTech+ app version 1.4 or higher.

The **Braille Chat** can be started under Smart Services in internal menu mode or by typing {Ctrl+Shift+c} on the keyboard.

The **Braille Chat** opens in HelpTech+, which is designed as a chat. The deafblind user can start writing right away. Enter outputs the text as a chat on the iPhone and speaks it. So "Hello, how are you?". The sighted person can answer with the onscreen keyboard, or even easier, press the microphone symbol and start speaking. The answer is immediately displayed on the Braille display.

Independently of each other, the deafblind person and the sighted person can read the chat history. If you start typing a new message, the focus automatically jumps to the end of the chat history on the corresponding page.

To ensure that the deafblind person recognizes that a new message is being entered for him when typing texts, the Activator Pro vibrates with every keystroke while typing.

With {Tab} you can switch between input and read mode on the Activator Pro. The previous entries in the current chat input will be retained. Pressing {Escape} will also switch from input to read mode, but in this case the previous input will be discarded.

The text of the sighted person is indented by 2 spaces on the Braille display. The text inputs on the Braille display are displayed left-aligned. In input mode, **"Chat:_"** is displayed on the Braille display .

When you're in the chat history, you don't have to press {Tab} to type a message. You can start typing right away, and the focus jumps to the input field.

5.2.5 Clock

The clock function can be used to display the date and time. In addition, a stopwatch is integrated.

If you select this menu item by pressing [N5], another menu level appears with the following subitems:

5.2.5.1 Display date/time

After selecting this item, the time of the internal clock of the Activator Pro is displayed. The time is displayed in hours, minutes and seconds, each separated by a colon. The time format (12 or 24 hours) can be set in the "**Options**" menu (see chapter 5.2.10.12 Date/time format).

In addition, the current day of the week is displayed in abbreviated form (two letters, e.g. Mo for Monday) followed by the current date in the format DD.MM.YY.

5.2.5.2 set Clock

You can set both time and date in this submenu. First, '**Time:**' is displayed, followed by the time as currently set. Dots 7 and 8 will blink at the location of the hour, which can be changed

by pressing the [N3/N6] and [N1/N4] keys. [N1/N4] decreases the hour by one, [N3/N6] increases the hour by one.

To switch to the minutes setting, you may press either [N5] or {Arrow right}. Entering {Arrow left} will move you to the previous setting. Minutes and seconds are changed in the same way as hours with the [N1/N4] and [N3/N6] keys. When you have finished setting the seconds, pressing the [N5] key moves on to the date, **'Date:'** is shown, followed by the date in English or continental format, depending on the setting in the **Options** menu; each detail is indicated by two digits and separated by a period. These values can also be increased or decreased with the [N1/N4] and [N3/N6] keys. When you have set the desired value, you may confirm it by pressing the [N5] key. When the year has been set, pressing the [N5] key returns you to the **Clock** menu.

5.2.5.3 Stop watch

With the stopwatch you can stop any period of time in hours, minutes and seconds. A preceding **'[X]'** before the current stopped time indicates that the stopwatch is running. To start and stop the stopwatch, press the [SPC] key. Alternatively, to start and stop the stopwatch, press a [CR] key above the time display or checkbox.

When the stopwatch is started, it automatically starts from 0. The stopwatch is reset with [N5]. You can exit the stopwatch display by pressing the [N2] key. The stopwatch continues to run in the background until you deactivate it.

5.2.6 Games

To facilitate learning Braille in a playful way, we have implemented two games on the Activator Pro: **"Braille Hunt"** supports the improvement of tactile reading skills. In the game **"Hangman",** individual letters have to be guessed to form a word.

5.2.6.1 Braille Hunt

The game **“Braille Hunt”** relies on the reading position detected by ATC as the only means of control. BrailleHunt is the first game to be playable without ever pressing a single key.

When the game starts, there will be thirteen dot patterns on the Braille display, each of them preceded by a full form to make them easier to identify. You should start by reading the leftmost pattern. Remember it well; because this is the pattern you need to search among the other twelve patterns to the right.

Once you have memorized the leftmost pattern, you can go on reading to the right, searching for it. If you think you found it, simply let your finger rest on it. You will hear a series of three beeps. As long as you hear beeps, you may still change your mind and continue searching to the left or the right of your current position. If you do not change your reading position during the three beeps, you will hear a little victory sound if you were right or a little warning sound in case you were wrong. In any case, a new round of game begins with a new dot combination to be hunted.

Attention: In this game, speed is required. If you have not found the right dot pattern within a few seconds, the round is considered lost and a new dot pattern appears. The game ends after 7 rounds. If you missed the right dot pattern three times in a row, the game also terminates.

5.2.6.2 Hangman

This is a variation of the classic game of Hangman, in which the Activator Pro generates a mystery word. Your goal is to guess the word by finding its individual letters.

When **Hangman** starts, there will be several dots on the Braille display. Each dot represents a letter of the mystery word. Now it is time to make your first guess by typing a letter. If the letter you typed in is a part of the mystery word, then all instances of it will be revealed on the Braille display and you will hear a little victory sound. On the other hand, if the letter you typed in is not part of the mystery word, you will lose a point and hear a little warning sound. With every point you lose, the warning sound will increase in pitch. To win the game, you will have to reveal the entire word. In this case the Activator Pro shows **'Congratulations! You have won!'** You lose the game when you make 7 wrong guesses. In both cases the game is over, and you have to restart it by calling the menu item. To exit the game at any time, simply press {Ctrl+e}.

The solution words are saved in the /HTSYS/LANGUAGE folder. Each selectable language can have its own file. The name of the file is built according to the following scheme: "Language_hangman.lst". If there is no file for the selected language, "English (US)_hangman.lst" will be used automatically.

You can add your own words to these files or add for a file for a specific language. Please note that a word consists of a maximum of 40 letters and only lowercase letters are allowed. After each word, there must be a newline character (CR/LF). After editing the file, you must re-start the Activator Pro for the changes to take effect.

5.2.7 Mass storage

To exchange files between the Activator Pro and a computer connected via USB, you can put the Activator Pro into **Mass storage**. To do this, select the menu item **Mass storage** from the main menu of the Activator Pro. The message **'Mass storage'** will appear on the Braille display.

IMPORTANT: In **Mass storage**, you cannot use the Activator Pro's internal functions. The Activator Pro can be used with a screen reader, and you can transfer files between the Activator Pro and your computer, just as you would with a USB flash drive or external hard drive.

We recommend that you eject the USB drive before exiting **Mass storage**.

To exit **Mass storage**, briefly press the Activator Pro's on/off button once. You can now use all internal functions again as usual.

Please note: When switching **Mass storage** on and off, the USB connection between the Activator Pro and the computer is briefly interrupted.

5.2.8 Braille character sets

The Braille character sets will be selected automatically according to the language selection. If you change the language to French for example, then the French Braille character set will be loaded as standard. The menu entry for the standard character set indicates in brackets, which Braille set is used. In case there is no special character set for the selected language, the standardized Braille character set (EuroBraille) identified as **"internal"** will be used.

This section discusses the creation, loading and activation of Braille character sets. In addition to the default character set for the selected system language, nine other character sets may be loaded into the Activator Pro.

5.2.8.1 Creating a Braille Character Set

The easiest way to create a custom Braille character set is to modify an existing character set. You will find several Braille characters sets in the installation directory of the firmware. For easier orientation, a subdirectory called "Brailletables" is created during installation which contains the characters sets.

For example, if you wanted to edit the ibm437 character set and store it as a new, customized character set, you would open the text Editor supplied with Windows by selecting "Execute" from the Start menu and then entering "Notepad" followed by {Enter}. Once the text Editor is open, you can open an editable version of the ibm437.asc file by activating the menu item "Open" from the **Editor** menu.

The file ibm437.asc will open and can be edited. Please do not modify the file structure but you may change the Braille characters as desired. The Braille dot combinations are given as their number equivalents on each line, along with the designation of the character. However, the first line in the file contains a description of the character set in that file. The characters are in ASCII character order. You can modify the dot combinations for any character by changing the numbers. For example, if you want to represent the digit 4 with dots 2 3 5 instead of dots 1 4 5 6, you will change the numbers 1 4 5 6 to 2 3 5. Please note that at least one space must be entered between the dot combinations and any comments, because otherwise the conversion of the Braille table while transferring it to the Activator Pro may fail.

When you finish changing characters, you can save the modifications under a new name.

5.2.8.2 Loading Braille Character Sets

As mentioned above, nine additional Braille tables can be loaded into the Activator Pro in addition to the default character set. For example, if you have created a table under the designation Mytable.asc, you can load it into the Activator Pro with the HTCom program. Start-up HTCom and activate "Load Braille Table". A dialog enables you to specify the character set to be transferred by selecting or entering the name. After pressing the {Enter} key you can specify the Braille table slot where you want the table to be saved. Pressing the {Enter} key again will initiate the file transfer.

Please note: If you work with the 6-dot character sets delivered with your Activator Pro, writing texts in the Editor, these texts will be stored entirely in upper case letters. The reason for this is that the capital letters' ASCII codes are found first while searching through the character set table.

5.2.8.3 Selecting and Activating Braille Tables

Once you have activated the menu item **'Braille character sets'** on the Activator Pro, you can select a character set and activate it by pressing [N5]. The slots besides the standard character set are empty in the condition of delivery. An X enclosed by square brackets indicates which character set is active. The menu consists of the following items:

[X] **Standard character set**: The default character set, which is always available.
#(1): **<empty>**
to
#(9): **<empty>**: Positions for the nine additional loadable character sets.

The designation **<empty>** shows that there is currently no character set stored at this position. If a character set has been downloaded, a name appears instead of **<empty>**, showing the file name, under which the character set was loaded into the Activator Pro.

If you attempt to activate an empty slot, the Activator Pro will respond with the message: **'Braille set n is empty'** where n is the number of the currently selected character set.

If the selected character set exists, it will be activated immediately and you will be returned to the main menu, menu item **'Braille character sets'**. The new character will then be activated.

Note: When using a custom character set, it is possible that messages or menu items suddenly become partially or entirely unreadable. This may be due to one of the following causes:

- The Braille character assignments in the custom character set do not correspond to the assignments in the character set used for generating messages shown.
- A custom character set contains errors. For example, if you have deleted a line in a character table, the table no longer consists of 256 definitions. This causes all character definitions following the deleted line to be moved up by one character. This could cause the word "info," for example, to turn into "jmen".

If you cannot read the Activator Pro's messages at all, you have the following options:

1. Use the communications program HTCom's Monitor Mode. Under Monitor Mode, the output is not affected by the Braille character set selected on the Activator Pro. With the assistance of a sighted person or your screen reader's speech output, you can monitor the output from the Activator Pro on the PC screen and restore the standard character set. Switching into Monitor Mode is possible only if the screen reader's access to the Braille display has been deactivated.
2. Create a situation where you are back in the main menu, so that you can navigate from there to the menu item **'Braille character sets'** by using the [N3] key. If you are sure that you are somewhere in the menu system, you can simply press the [N5] key several times and then [N3] exactly nine times. Then press [N5], which opens the submenu. Pressing [N5] again will activate the default character set.

5.2.8.4 Delete selected braille set

If the loadable character set feature is used extensively, all slots will eventually be filled. In order to delete a given Braille character set, please proceed as described below:

1. Activate the character set to be deleted in the submenu **'Braille character sets'**.
2. Open **'Braille character sets'** again and move through it to the end.

You will arrive at the menu item **Delete selected braille set**. Once you have activated this command, you will be asked whether you really want to delete the character set. If you answer "Yes" the character set selected in the previous step will be deleted and the default character set will be activated.

5.2.9 Info

You can check flash memory usage in the **'Info'** menu. You can also check the firmware version and serial number and determine the configuration of the Computer keyboard.

5.2.9.1 Memory usage

The Activator Pro contains 32 GB of text memory which equals text consisting of more than 32 billion characters.

After you select **'Memory usage'**, the size of free disk space will be displayed in GB (gigabytes). You can exit this menu item by pressing [N2].

5.2.9.2 Keyboard layout

This function displays the language of the keyboard table currently used by the Activator Pro. Keyboard tables which are available in several languages, the included Keyboard Layout Compiler (BKC) can be used to create custom key assignments.

5.2.9.3 Serial number

With this function, you can check the serial number of your Activator Pro. This can be useful for service purposes.

5.2.9.4 Versions

Here you can check the versions of several software modules of the Activator Pro.

5.2.9.4.1 firmware

You can use this function to display the version number of the firmware. This is the same version number that is displayed when you power up your Activator Pro.

5.2.9.4.2 bluetooth

This module deals with the wireless communication via Bluetooth.

5.2.9.5 Maintenance info

Here you can find information about maintenance, repairs and delivery dates as described in chapter 3.2 Turning the Power On.

5.2.9.6 System information

This function displays important system information in almost any situation. It is NOT provided as a menu item, but rather has to be called by pressing {Shift+Enter}. The following information is displayed:

- Date and time (updated continually)
- Free memory

The above information is not displayed in a single message, but sequentially. To move from one line to the next, you must press [N5]. Pressing [N2] after the free memory has been displayed terminates the function. [N2] can also be used to terminate the display at any time. If, for example, you want to see only the date and time, you can press [N2] immediately after the first line and return to wherever you were working before you called the function.

The system information function can be called from almost anywhere (Editor, file list, etc.) in the Activator Pro. The only exceptions to this are:

- The menu **Clock** and its sub-menus
- The menu **Info**

- During communication with other devices (e.g. file transfer).

5.2.10 Options

The options described below are used for customizing your Activator Pro's features. The various options are specified by using checkboxes or radio buttons contained in the submenus. You can review additional information regarding checkboxes and radio buttons in chapter 3.3.6 and 3.3.7.

The **Options** menu is closed as usual by pressing [N2]. Changed options are saved immediately after the change.

5.2.10.1 6 dots braille

This option allows you to toggle between 8-dot Braille (computer Braille) and 6-dot Braille. The 6-dot representation suppresses dots 7 and 8. Even if you enter text in 8-dot Braille, e.g. for capitalization, your entries will be saved correctly.

5.2.10.2 hotkeys Activate objects

If this option is activated, menu items can be activated on the current menu level via hotkeys. This means:

- Submenus are opened immediately.
- Checkboxes will change their state.
- Radio buttons will be activated.

5.2.10.3 Highlight hotkeys

When **Highlight hotkeys** is active, the hotkeys are highlighted by being enclosed in round brackets. This is useful when you are working in 6 dot Braille or while you are still learning the hotkeys.

5.2.10.4 show sYstem files

If you activate this checkbox, the system files needed by the Activator Pro will be displayed in the file list, along with the files created by you.

WARNING!!!

We recommend not to activate this option. There are several reasons:

1. You only need to display system files under rare circumstances and navigating through the file list will be much faster without them.
2. Displaying them also makes it possible to delete system files. You will receive a warning if you attempt to delete system files, however, if you delete, for example the currently used message file, you can no longer work on the Activator Pro until this file has been restored. You should therefore delete system files only if you are sure you know what you are doing.

You take on a great deal of responsibility by being given the option to delete system files. Help Tech GmbH & Co. KG therefore accepts no warranty claims arising from any damage caused by deleting system files.

5.2.10.5 fOlders first

This option determines whether the folders or files are listed first in the file list. By default, this option is set which means the folders are listed first. If you want the files listed first, you can deactivate this option by pressing [SPC].

5.2.10.6 Quick entry

This option is only relevant if Braille input is activated. If it is activated, keys [7] and [8] will have a different function: pressed individually, [7] is now the backspace key and [8] by itself is the N5 key. When pressed together with other keys, [7] and [8] retain their original function. For example, [SPC+7] still moves the cursor to the left and capital letters can also be typed as usual.

5.2.10.7 One hand mode

For blind people with only one hand, we have developed the one-handed mode for Braille. To turn on one-handed mode permanently, enable this feature. If you turn on one-handed mode by pressing and holding [N2] while turning on the Activator Pro, one-handed operation will only be active until the Activator Pro is turned off. You can read how Braille input works in one-handed mode in chapter 3.3.3.

5.2.10.8 show file attriButes

This option controls whether file attributes are displayed on the file list or not. If this option is activated, the file list will show the size as well as the date and time of the most recent access to the file in addition to the file name. This function will slow navigation through the file list.

5.2.10.9 Startup mode

Startup mode determines what the Activator Pro will do after it starts up in work mode. The **Startup mode** options are provided in the form of radio buttons. One of the possible settings described below is always active.

5.2.10.9.1 Main menu

After start-up, the Activator Pro opens the main menu. From here, you can manually navigate to the various submenus.

5.2.10.9.2 autoNew

This option makes use of the Activator Pro's capability to automatically open a new, empty file within the Editor immediately upon start-up in work mode. This option comes in handy if you frequently use the Activator Pro for entering notes in a new file after switching it on.

5.2.10.9.3 autoEdit

This option activates the Activator Pro's capability to automatically open the most recently closed file in the Editor upon start-up in work mode. After opening the file, the cursor will be at the same position it was when the file was closed. Please note that this option will not open the file that was last opened, but the file that was last edited and saved.

This option is the most useful one if you frequently use the Activator Pro to make notes in the same, already existing file after switching it on.

5.2.10.9.4 Left USB port

This option activates the ability of the Activator Pro to automatically activate the left USB-C port after switching on, so that the Braille display can be directly addressed by a screen reader. This setting is preset by default.

The use of internal functions, such as the editor, is only possible after returning to the internal menu mode.

5.2.10.10 Tone signals

When switching on and operating internal functions, the Activator Pro can emit signal tones. For example, at the end of a selection list, a signal tone can be emitted when trying to navigate further.

The Activator Pro outputs messages in Braille when critical events occur, such as error messages and warnings. In addition to the messages, signal tones can also be output.

Depending on the situation (e.g., lecture hall or train) and how experienced you are in using Activator Pro, you can turn signal tones on and off separately for each event.

Checkboxes allow you to turn the respective signal on and off. Below is a list of possible settings and their default values for signal tones:

Checkboxes for signal tones

[x] **Errors**
[ ] **Warnings**
[ ] **action Confirmations**

For the signal tones, only **Errors** are activated by default.

5.2.10.11 Vibration

When switching on and operating internal functions, the Activator Pro can emit vibration signals. For example, a vibration can occur at the end of a selection list when trying to navigate further.

The Activator Pro outputs messages in Braille when critical events occur, such as error messages and warnings. In addition to the messages, vibration signals can also be output.

Depending on the situation (e.g. lecture hall or train) and how experienced you are in using Activator Pro, you can switch on/off signal tones and vibration signals separately for each event.

Checkboxes allow you to turn the respective signal on and off. The following is a list of setting options and their default values for vibration signals:

Checkboxes for vibration

[x] **Errors**
[x] **Warnings**
[x] **action Confirmations**

For vibration, all signals are enabled by default.

5.2.10.11.1 Errors

The Activator Pro generates a tone and/or vibration only if an error has occurred. In addition to internal errors, errors can also result from operator mistakes, but these are usually not indicated by any message in Braille.

5.2.10.11.2 Warnings

The Activator Pro generates a tone and/or vibration only in case of warnings.

5.2.10.11.3 action Confirmations

The Activator Pro generates a signal when a complex action, such as opening a file in the editor, was successful. If this option is activated under Signal tones, a start-up melody sounds when the Activator Pro is switched on.

5.2.10.12 Date/time format

Any settings specified here will affect the entire System, including the Editor. If you specify the 12-hour format, the time will be displayed in the 12-hour format everywhere; otherwise the 24-hour military time format will be used. Also, if English dates are specified, the international convention for date (month first, then day) and time will be used.

5.2.10.13 Input indication

By changing the search direction within a Braille table, it is possible to input language specific characters using the same Braille dot combinations that are also used for normal alphanumeric characters.

For example, in Arabic the dot combination 1 2 4 is used for a certain Arabic character. The same dot combination is also used for the letter “f”. In the Arabic Braille table consisting of 256 characters, you find the Arabic letters beyond position 128. To enable the user to enter Arabic characters by using a specific dot combination, it is possible to change the search direction in the table. The Braille table will then be searched for the matching character from end to beginning instead of the standard forward search direction (i.e. searching from position 0 to 256). In case of Arabic, when using the backwards search direction, the corresponding Arabic character can be found when entering a certain Braille dot combination for a Latin character. In order to change the search direction, there are the following two chord commands:

- [SPC + 2 3 6] activates the backwards search direction which is indicated by a low-pitched tone.
- [SPC + 3 5 6] activates the forward search direction which will be indicated by a high-pitched tone.

In order to have an indication which search direction is activated, this option allows you to set an indicator signal. Using a radio button, one of the following three settings can be activated:

No indication: No indicator tone will appear when entering Braille dot combinations.
Latin mode: When entering a Braille dot combination with active forwards search direction, a deep indicator tone appears.
nOn latin mode: Entering a Braille dot combination with active backwards search direction, a high-pitched signal tone will appear.

We recommend pre-setting the search direction for the type of characters you normally use. For example, for entering Arabic text it is better to activate backwards search direction. For the Indicator tone we recommend selecting **”Latin mode”**. When entering Latin characters in Arabic text, a signal tone will appear. If you use a Braille table from Help Tech, the search direction is automatically set in the right way.

5.2.10.14 dot Firmness

While reading text, it can be helpful to adjust the dot pressure of the Braille pins to your individual needs. You can choose between the three settings **Soft**, **Middle** and **Hard**. The default setting is **Middle**.

Experienced Braille readers often read the Braille cells with a light touch. Here we recommend using the setting “**Soft**”. This setting also improves the detection of the reading position by ATC.

You can also adjust the dot firmness within the setting dialog of the Help Tech Braille driver (see chapter 8.5). Please be aware, that the settings are saved on the Activator Pro, not on the PC.

5.2.10.15 atc sEnsitivity

When using ATC, we recommend adjusting the ATC sensitivity to your individual needs. You can choose a value between 1 and 7. The standard setting is “7”.

Note: If the automatic scrolling via ATC is not working properly, we advise you to adjust the ATC sensitivity.

5.2.10.16 staNdby

With the **staNdby** option, you can specify a period of time after which the Activator Pro should automatically put itself into a sleep mode in order to protect the Braille cells. If you switch it off, the Activator Pro will not shut down. For activated standby you can choose a delay of 15, 30, 45 or 60 minutes. If you do not work with the Activator Pro or press any key, the Activator Pro will automatically switch off. The Braille display shows "**standby**", which is slowly fading out. When you press any key in standby the Activator Pro wakes up and you can continue to work. No data will be lost when **staNdby** becomes active. The default setting is 15 minutes.

5.2.10.17 Language

Hereby you have the possibility to quickly switch between different languages without having to upload the firmware again. In addition to the menu language, the keyboard layout and - if available - the Braille table will be switched automatically. For some languages, however, only English is available as menu language (marker: Engl).

5.2.10.18 Left USB port

In order to be able to set the correct protocol for a device connected via the left USB-C port, so that the Activator Pro can operate the device correctly, it is necessary to select the appropriate protocol:

- **Legacy protocol**: used for Windows and Android systems (Windows PC, Android phone, etc.). This is the default setting for the left USB port.
- **HID protocol**: used for Apple devices (Macbook, iPhone, etc.)

5.2.10.19 Right USB port

In order to be able to set the correct protocol for a device connected via the right USB-C port, so that the Activator Pro can operate the device correctly, it is necessary to select the appropriate protocol:

- **Legacy protocol**: used for Windows and Android systems (Windows PC, Android phone etc.)
- **HID protocol**: used for Apple devices (Macbook, iPhone, etc.). This is the default setting for the right USB port.

Note: To use an iPhone or iPad with HelpTech+, you must use the right USB-C port with HID protocol.

5.2.10.20 Keyboard layout for iOS Apps

Regardless of the system language, you can change the keyboard mapping that the Activator Pro uses to launch iOS apps. To do this, use the **Keyboard layout for iOS Apps** entry in the **Options** menu. Select the keyboard language that is set on your iPhone here so that iOS apps can be launched correctly.

5.2.10.21 Restore list of iOS Apps

Since the list of iOS apps is editable, there is a risk that this list will fall into an unusable state. This option can be used to restore the original list, as it was when shipped. All changes will be undone with this.

5.2.10.22 Delete bondings on startup

Enable this option if you've paired Bluetooth devices that you don't want to use again afterwards, such as a friend's phone. The Activator Pro will then not try to connect to these devices again. This saves time for a futile connection search. By default, this option is disabled.

Please note: This will remove ALL Bluetooth devices, including the ones you use every day. You will then have to re-pair them.

5.2.10.23 Smart switching

The **Smart switching** feature means that you don't have to manually switch between channels the first time a channel receives Braille information after being connected. This means that the switch only happens the first time after connection and not every time Braille information is received.

By default, this option is turned on. However, you can also turn them off if you prefer to switch manually.

5.2.10.24 Restore factory defaults

By pressing the [N5] key over this item, you can restore factory defaults for all options. Activator Pro will prompt you whether you are sure to proceed.

The default settings are the following:

6 dots braille: off
hotkeys Activate objects: off
Highlight hotkeys: off
show sYstem files: off
fOlders first: on
Quick entry: on
show file attriButes: off
Startup mode: **Left USB port**
Tone signals: **Errors** on, **Warnings** and **action Confirmations** off
Vibration: on to all
Date/time format: 12-hours and English Dates: on
Input indication: off
dot Firmness: **Middle**
atc sEnsitivity: 7
staNdby: 15 minutes
Language: remains unchanged
Left USB port: **Legacy protocol**
Right USB port: **HID protocol**
Keyboard layout for iOS Apps: System language
Delete bondings on startup: off
Smart switching: on

5.3 Editor

The **Editor** allows you to read and edit files. Up to five files can be opened at the same time. Any file can be opened from within the **Editor** if the exact name of the file is known.

5.3.1 Overview of Editor Functions

The **Editor** provides the following features:

- Text input, moving the cursor and setting bookmarks.
- Quick transfer of files or text blocks from the Activator Pro to a connected device.
- Translation from uncontracted Braille into contracted Braille and reverse.
- Insert, overwrite and read-only modes.
- Status display.
- Block functions (copy, cut, paste, change mark and cursor).
- Text search functions, both forward and backward.
- Replacing text (forward direction only).
- Calculator within the Editor.
- Opening additional files and switching between files.
- Suspending the Editor temporarily while attending to other tasks.
- Closing and saving files.
- Help.
- Setup menu for the Editor.
- Automatic scrolling while reading using ATC.

The following paragraphs describe each feature in detail.

5.3.2 Dialogs and Confirmation of Actions

For many reasons, the Editor provides a dialog that allows you to select or enter the desired value. In addition, the Editor provides confirmation messages in order to inform you of any changes that were made.

While you are in a dialog field, the Editor features several hotkeys to help you enter values quickly and efficiently:

- The Paste command {Ctrl + v} allows you to copy the current contents of the clipboard directly into the field.
- A parameter's default setting or the most recent setting of that parameter can be restored using the Copy command {Ctrl + c}.
- The text contained in a field will be deleted starting from the cursor position to the end of the field if you enter the Cut command {Ctrl + x}
- If you move the cursor towards the right within an input field, the existing input characters will not be deleted. Therefore, you only need to enter the characters that you want to change.

You have several options for exiting any dialog or message:

1. You can confirm your input with the [N5] key which activates the desired function.
2. If you press the [N2] key, you can close a dialog without committing any changes or exit a message when you have finished reading it.
3. You can simply wait a short time, until the dialog or message closes automatically. The duration of the timeout can be customized in the Editor's setup menu.

The Editor uses the following tone signals and/or vibrations that alert you of all successful actions or errors. You can turn off the tone signals and vibrations in the Activator Pro's **Options** menu.(see chapter 5.2.10.10 and 5.2.10.11).

- Confirmation (single beep): A function has been executed successfully.
- Warning (two short, high beeps): Sounds if no input has occurred for longer than expected or when the display's contents have changed, for example because a status message has been issued. The warning signal also sounds if you attempt to move the cursor beyond the beginning or the end of the file.
- Error (several consecutive warning beeps): Alerts you that an error message is being displayed.

5.3.3 Entering and Deleting Text

With the Braille input function (see chapter 3.3.2 Braille input and Chord Commands), you can also enter text in Braille. If you have entered a valid character, that character will be displayed at the cursor position. The cursor is represented as dots 7+8 on the Braille display. When a character has been entered, the cursor moves to the next position. After a character has been entered in the last position on the display, the cursor returns to the first Braille position. The length of a line is not limited while entering text. You can specify the end of a line at any time by pressing the [N5] key.

To delete any character, you can either use {Backspace} or [SPC+1 2] to delete the character to the left of the cursor or {Delete} or [SPC+4 5] to delete the character at the cursor position. If the delete function you entered is not possible because you are at the beginning or end of a text file, you will hear the warning tone which indicates that this action is not possible.

5.3.4 Reading Text

You can navigate to the left with [N1/N4] and to the right with [N3/N6] for reading text. You can also use the navigation keys on the computer keyboard. A tone indicates that you have reached the beginning or the end of the text. The specific functioning of the reading keys can be customized in the Editor's setup menu.

If you have been reading the text and want to return to the cursor position, you can accomplish this by simply pressing the [N2] key. Alternatively, you can just begin to enter text or execute other types of actions. The Activator Pro will then automatically display the area where the cursor is located. On the other hand, you can also quickly move the cursor to your current position by using the cursor routing keys and then continue to enter changes there.

If a word does not fit at the end of the display, you can instruct the Editor in the setup menu to automatically suppress that word and display it in full on the next line after moving the display towards the end of the text.

It is also possible to have the current character displayed in various ASCII formats (hexadecimal, octal representation). This function is initiated with the {Ctrl + Shift + d} command. To exit this display mode, simply press the [N2] key.

The Editor also provides an automatic reading mode. In this mode, the text scrolls forward automatically by one entire display line. The reading speed can be adjusted individually in the Editor's Setup menu, but you can also adjust the speed while you are reading by using [N3/N6] or [N1/N4]. To activate automatic reading mode, press [SPC+ N3/N6]. The cursor is not moved along with the text during automatic scrolling. Pressing any cursor routing key

will position the cursor at that location within the text and stop the automatic scrolling. You can also move the display section manually by pressing the [SPC] key without affecting the automatic scrolling speed.

5.3.5 ATC within the Editor

With {Ctrl + a} you can activate and deactivate the automatic scrolling via ATC. The Activator Pro emits an acoustic confirmation tone when the ATC function is switched on/off. Using ATC, the Activator Pro detects when you have read the last Braille character displayed and scrolls on automatically without pressing any key.

With this version, we have further improved the reading experience by providing additional convenience features. These are all turned off by default but can be activated using their respective chord commands.

1. **End of line marking:** This feature will display a full form at the end of the displayed text if the line is not already filled. Using this function, you always know when you have reached the end of the currently displayed text. You can toggle this function by pressing [Chord 1 6].
2. **Waiting longer for shorter lines:** Some users reported that short lines of text tend to scroll off the display too quickly. When this feature is turned on, the Activator Pro will wait slightly longer before scrolling beyond a short line of text. Use [Chord 1 2 6] to toggle this function.
3. **Tone signal:** Plays a short beep every time the display scrolls automatically. This can be toggled with [Chord 1 4 6].
4. **Flicker:** This feature causes the Braille display to be cleared for a short time before automatic scrolling takes place. The effect can be described as to what a sighted user would experience with a flickering display. This is less obtrusive than a tone signal but still makes it easier to determine when the display scrolls. To toggle Flicker on/off press [Chord 1 4 5 6].

5.3.6 Moving the Cursor

To move the cursor without changing any text, you can use the so-called cursor routing keys. These keys, also known as [CR] keys, are built into the Braille elements. A small fin on the Braille elements is used to press the [CR] keys. The [CR] keys' shape is designed to facilitate navigation.

If you attempt to use the [CR] keys to move beyond the end of a line, the Activator Pro will beep and the cursor will be positioned such that you can continue to enter characters.

The Editor provides the following functions for moving the cursor:

- When you enter {Ctrl + Home}, the cursor jumps to the top of the file. Use {Ctrl + End} to move the cursor to the end of the file.
- You can move the cursor to the beginning of a sentence by entering {Ctrl + Arrow up} or to the beginning of the next sentence by entering {Ctrl + Arrow own}. The cursor will move to the nearest period, colon, exclamation mark or question mark.
- You can also jump to the front or back of the current line of text by entering {Home} to move to the front of the line and {End} to move to the end of the line.
- After entering {Ctrl + Arrow left}, the cursor jumps to the beginning of the previous word and after entering {Ctrl + Arrow right}, it jumps to the beginning of the following word.

The cursor can also be moved one character at a time as follows:

- with {Arrow left} one character to the left
- with {Arrow right} one character to the right
- with {Arrow up} one line up
- with {Arrow down} one line down

If you move the cursor towards the left past the beginning of a line, the cursor is positioned at the end of the previous line. If you move it past the end of a line, moving towards the right, it will be positioned at the beginning of the next line. When you move the cursor up or down, it is always positioned at the beginning of the corresponding line.

Please note that tab characters are displayed as a certain specifiable number of spaces. Tabs are saved in the file either as tab characters or they can be replaced by several spaces. You will find more detailed information regarding tabs in chapter 5.3.23.13 seqq. If a tab is saved as a tab character in the text and you move the cursor to the first position of the tab and on through the tab, the remaining spaces will be skipped and the cursor moves directly to the first position after the tab. If you position the cursor inside a tab using the CR keys, it will be positioned at the tab's first character and a warning tone will also be issued.

It is also important to remember that jumping through words or sentences might be difficult or impossible in grade two texts because words can contain punctuation marks.

When a file is closed, the current cursor position is saved. When you open the same file again later, the cursor will be positioned at the same location it was in when the file was closed. However, in certain cases the saved cursor position may be lost. Further information may be found in chapter 5.3.19.

5.3.7 Editing Modes {Insert}

By entering {insert} you can toggle between insert and overwrite mode. The default is insert mode, i.e. entered characters are inserted at the cursor position and the following text is pushed back. In overwrite mode, the present text is overwritten by entered characters after the cursor position. When you reach the end of a line in overwrite mode, any additional input characters will be added to the line, without overwriting the next line. If you want to delete a section of text that consists of more than one line, it would therefore be easier to mark that section as a block and then delete it. You can subsequently enter your new text in insert mode.

Insert and overwrite modes are indicated by different cursor shapes. In the default insert mode, the cursor is an underline (dots 7+8), while in overwrite mode the cursor will be displayed as a block (all 8 dots). Both cursor shapes blink. You have the option of assigning different cursor shapes in the setup menu but only these two shapes are possible.

There is one more editing mode, the read-only mode, in which the text can only be displayed, not modified. If you are in read-only mode and attempt to enter text, the Activator Pro will only generate warning beeps. Read-only mode is specified when opening a file and once it is open, the editing mode cannot be changed. You can set a file to read-only mode in the Editor's setup menu, or you may open any file in read-only mode from within the Editor.

5.3.8 Status Display {Ctrl + Shift + s}

The {Ctrl + Shift + s} command allows you to activate the Editor's status display for the current file. The following information is displayed in list form:

- The name of the current file

- The current editing mode (insert, overwrite, read-only)
- The file's modification status (modified or not)
- The beginning and end of a marked block
- The position of the character in the text which is the current cursor location
- The number of the current column

5.3.9 Set Mark (N1/N4 + N3/N6)

By pressing [N1/N4 + N3/N6] at the same time, the current cursor position is remembered as a "mark". You can use this mark like a bookmark to easily find that place in the text. Up to 10 marks can be set for any file.

A dialog will open asking you for the name of the mark. You can enter up to 24 letters or you can select a name from the list of marks you have already created for this file. By pressing [N5] the mark will be set and remembered under the designated name. If you have entered a name which already exists as a mark, you will receive a message asking whether you wish to overwrite that mark. By confirming you permit the overwriting of the previous mark. If you have already set 10 bookmarks, your only options are to select and rename or overwrite one of the existing marks. If you select the name of an existing mark at the beginning of this dialog, you will not receive any additional questions about overwriting that mark. When a mark has been set, a beep confirms your action.

If you edit the text after you have set a mark, the position of the mark will be adjusted to reflect such changes. This means:

- If you enter or delete any text, all marks located between the cursor position and the end of the text will be adjusted accordingly. When you jump to any mark, you will move to the desired location.
- If you delete a character which had been set as a mark, the mark will still be retained.

5.3.10 Jump to Mark {Ctrl + m}

Entering {Ctrl + m} lets you jump to a mark you have previously set by pressing [N1/N4 + N3/N6]. A list of all available marks will be displayed, and you will be positioned at the end of the list. Now you can navigate through the list by moving the cursor up and down or you can enter the name of the desired mark. If you move down after opening the list, you will reach the top of the list.

To jump to the selected mark, press [N5]. The Editor keeps track of the position from which you jumped to the mark as the beginning of a block. This enables you to return to your original position immediately. How to use blocks is described in the sections below. If you enter a name which does not exist as a mark, you will receive the message **'Bookmark x does not exist'**. You can now enter or select a new name. If no marks have been set in the current file, you will be notified with a message **'No bookmarks set'**.

Please note: In certain situations, your previously stored marks may no longer be available. You will find details about this in chapter 5.3.19.

5.3.11 Delete Mark (N1/N4 + N3/N6, Select Name, SPC)

If you want to delete a mark, activate the function for setting a mark by pressing [N1/N4 + N3/N6] at the same time and then select the mark you wish to delete from the list using {Arrow up} or {Arrow down}. Enter a space to delete the name of the mark, then press [N5].

You will be asked whether you really want to delete the mark. If so, answer with [**y**] and the mark will be deleted.

5.3.12 Block Functions

This feature enables you to work with entire blocks of text at a time. The procedures for working with blocks resemble those familiar from modern PC operating systems:

- You mark a certain selection of the text.
- The selection may be either copied or cut and is temporarily stored on a clipboard.
- From here, the selection may be pasted at a different place in the same file or even in another file.
- You also have the option of saving a marked text block directly to a new file.

A block can also be deleted or pasted into a new file or an input field. Block operations may cause the Editor to run slow. The following paragraphs describe the use of blocks in detail.

5.3.12.1 Marking the Beginning of a Block {Ctrl + Enter}

To mark the beginning of a block, place the cursor at the desired position and enter the key combination {Ctrl + Enter} or press the cursor routing key twice. You do not need to set a special mark for the end of a block. Simply move the cursor one position to the right of where you want the block to end and press the cursor routing key. While moving the cursor, you will notice that all text between the beginning of the block and the current cursor position appears underlined with dots 7 and 8.

Let us assume you had typed the text "This is a test" and wanted to mark the words "This is" as a block. Before undertaking any block operations, the cursor should be moved to the space between the words "is" and "a".

Marking text as a block is possible in either direction. You can therefore set the beginning of a block and then move back towards the top of the file. In this case, the end of the block is located to the left of the cursor. In other words, the character at which the cursor is currently located is part of the block.

Instead of marking a block by moving the cursor character by character, you can also jump from a desired block location to a mark. Another way to quickly mark off a block is by using one of the search functions described below, if the first word appearing after the desired block is known. Simply mark the beginning of the block by pressing {Ctrl + Enter} simultaneously and then execute a search for that word.

If you press the [N2] key while marking a block, the underlines indicated by dots 7 and 8 will be removed, but the beginning of the block is still saved. If you change your mind and decide to copy or cut the marked text block after all, you must first restore the underlining. To do this, you can use the function “Exchange Mark and Cursor (Chord 7 8)” which is described in chapter 5.3.12.5. After activating this function, the underlines reappear, and the cursor will be located at the beginning of the block. Activating the function again will position you at the end of the block.

5.3.12.2 Copy {Ctrl + c}

Once you have positioned the cursor at the end of the block, you can copy the block to the clipboard by entering {Ctrl + c}. A message from the Editor displays the percentage of the block that has been written to the clipboard.

The Copy command has a different meaning while you are in an input field: It will restore the default settings.

5.3.12.3 Cut {Ctrl + x}

You can cut a block with {Ctrl + x}. This results in the block being deleted from the file and stored on the clipboard. While cutting the block, the Editor informs you about the percentage of the block that has been written to the clipboard.

If you enter {Ctrl + x} while you are in an input field, all characters from your current cursor position to the end of the dialog field will be deleted.

5.3.12.4 Paste {Ctrl + v}

Any text contained in the clipboard can be pasted at the current cursor position by entering {Ctrl + v} or you can open another file and paste the selection there. Please remember that the block is always pasted exactly before the current cursor position. Since pasting does not delete the block from the clipboard, you can paste a block several times over. The Editor displays a percentage while pasting, that indicates how much of the block has already been written and that it is being written from the clipboard.

The paste command can also be used for writing in input fields. For example, if you want to use a chapter title as the name of a bookmark, you can mark that title in the file as a block, copy it to the clipboard with {Ctrl + c}, then move the cursor to the desired position for the mark, press [N1/N4 + N3/N6] and respond to the dialog prompting you for the name of the mark with {Ctrl + v}.

The contents of the clipboard remain intact as long as the Activator Pro is in operation, so that you may paste several times, including into other files. However, once the Activator Pro is turned off, the contents of the clipboard are deleted upon turning the device back on. The memory available for the clipboard is limited by the remaining free memory in the file system.

5.3.12.5 Exchange Mark and Cursor (Chord 7 8)

This function is only available when Braille input is activated or in combination with the {Fn} key. You can use this command to return to your original position after executing the following functions:

- When you have jumped to the beginning or end of the file.
- When you have marked a text block in order to copy or cut it. In this case, you will return to the beginning of the block, where you can use one of the block functions.
- When you have pressed [N2] while marking a block.
- When you have pasted text from the clipboard into the file.

This function will set a mark at your current position in the text and the cursor will be returned to the position it was in before one of the functions listed above was executed. The section of text between this mark and the cursor will now be marked as a block. You can easily cancel the underlines if desired by pressing the [N2] key.

If you enter the command again, the previously set mark and the cursor position will be exchanged again. You can therefore use this function to jump from the beginning to the end of your text block and back or to jump back and forth between your current and the previous cursor position.

5.3.12.6 Deleting a Text Block {Ctrl + Shift + x} or {Backspace}

If you want to delete a large section of text which you do not want to paste anywhere else, you can enter the {Ctrl + Shift + x} command which cuts the block without writing it to the clipboard. Alternatively, you can also use the backspace command. Again, you will be notified in terms of a percentage value that the text is being deleted.

5.3.12.7 Saving a Block to a File {Ctrl + s}

When you have marked a block, you can save it in its own file by using {Ctrl + s}. The text block will not be deleted from the current file. Additional details regarding the saving of files are contained in chapter 5.3.19.

5.3.13 Searches

You can scout a search string in a text file in two different ways: with an incremental search or with a buffered search. Both searches can move either forwards or backwards. Any search begins at the cursor position.

5.3.13.1 Incremental Search {Ctrl + f}

The command {Ctrl + f} initiates an incremental search for a certain text in forward direction, i.e., moving from the current cursor position towards the end of the file. The message **'I-Search:'** appears, followed by the cursor. As you enter the search string, the search already begins. You are automatically positioned at the first occurrence of the search string you have entered so far. If you erase a character from the search string using the delete command, you are transported backwards to the place where the remaining search string can be found. While the search is in progress, the entered string is displayed blinking. If the search string cannot be found, you will receive the following message: **'Search failed, wrap around (Y/N)?'**. If you answer by entering [**y**], the same search begins again from the beginning or end of the text, respectively. If the search string still cannot be found, you will receive the same message again. You can now enter [**n**] to end the search.

When the desired string has been found, press [N5] to continue editing your text at that location.

If you want to search a string starting at the beginning of the text, you can first move the cursor to the beginning of the text by pressing {Ctrl + Home}. By entering {Ctrl + f}, the search will be repeated, and the last search string will already be entered. If you are at the first occurrence of the desired string, you can immediately reinitiate the same search by pressing {Ctrl + f} again, as long as you do not press [N2]. However, this only applies to the current editing session. Once the Editor is closed or the Activator Pro switched off, the search string will be deleted.

Any search can be aborted while entering the search string or during the search by pressing the [N2] key. Every time the text is found, a signal tone sounds, and the cursor will be placed one character to the right of the found search string. You can make the search case sensitive if you change the corresponding setting in the Editor's setup menu.

5.3.13.2 Buffered Search

A buffered search means you first enter the entire search string and the search does not begin until you press [N5]. To initiate a buffered search, enter the command for an incremental search, {Ctrl + f}, followed by [N5]. You will then receive the message **'Search:'**. Enter the search string. The search begins when you press [N5] again.

To indicate the difference between an incremental and a buffered search, the Activator Pro displays **'Search:'** while you enter the search string. An incremental search is indicated by the prefix "I", a search in reverse direction will be trailed by the word “back”. If you are executing an incremental search in reverse direction, the prompt for entering the search string will look like this: **'I-Search back:'**.

When the search string has been found, the cursor will be at the first character of the search string and you can immediately begin working, without having to first press [N5] as you would need to in the case of an incremental search. If you want to repeat the search, please position the cursor to the right of the found string and then activate another buffered search as described above.

5.3.13.3 Backward Search {Ctrl + Shift + f}

With {Ctrl + Shift + f} you can initiate a backwards search through the text towards the beginning of the file. The procedures are the same as for a forward search. When the search string has been found, the cursor will be located at the first character position of the search string. In both types of searches described above, you can even change the direction of the search during the ongoing search by entering the appropriate command after being placed on the search string.

5.3.14 Replace {Ctrl + r}

If you want to search and replace a term, enter the command {Ctrl + r}. Just as in a buffered search, you will be asked to enter a search term. The message **'Replace:'** appears on the Activator Pro. Enter the search term. By pressing [N5], you indicate that you have finished entering the search string and the message **'Replace x with:'** appears instead, (x is the previously entered search string). Type in the text with which you want to replace the search term. Again, as in a search, pressing [N5] initiates the replacing procedure. When the first occurrence of the search string has been found, you will be positioned at that place in the text. You now have the following options:

- Enter [**y**] to replace the search string with the replacement text.
- If you enter [**n**], you will move on to the next occurrence of the search string and the previously found text will not be replaced.
- If you enter [**g**] for global replace, the found and all subsequent occurrences of the search term will automatically be replaced without a prompt. During this procedure, the message **'Replacing, please wait...'** is displayed. When the Editor has reached the end of the file, it indicates how many occurrences of the search string were replaced. The message **'Replaced n occurrences'** appears, where n is the number of occurrences of the search term that were replaced.

When replacing the setting of the option “**Find Exact**” (see Section 5.3.23.9) has no influence. You must enter the exact expression for the replace function.

Replacing is only possible in forward direction, from the cursor position towards the end of the file.

5.3.15 Calculator

With the calculator function, you can perform and save calculations directly in the editor of your Activator Pro. The calculation accuracy is limited to 15 digits, whereby the decimal point can be freely positioned within these 15 digits. The following arithmetic operations are available:

+ Addition
- Subtraction
* Multiplication
/ Division
() Bracketing with up to 10 pairs of brackets, whereby the brackets may be nested
% Calculation of percentages

Only digits and arithmetic operands are allowed for entering the calculation. It is possible to enter letters, but this is only for commenting purposes.

Simply enter the desired arithmetic operation. Spaces are not allowed. Here is an example:

'3*5+6'

Pressing {Ctrl+Shift+Enter} causes the expression to be calculated and the result is displayed before the expression. In the example above, this looks like this:

'21 = 3*5+6'

In the calculator options (see Sections 5.3.23.7 and 5.3.23.8), you can define whether the result is to be displayed before or after the expression or on its own. By default, the result is displayed as in the example above before the expression.

You can navigate through the individual calculation steps with [N1/N4] and [N3/N6] if, for example, you wish to modify an earlier expression. This means that you do not have to enter the complete expression again. In our example, we want to insert a pair of brackets:

'3*(5+6)'

Pressing {Ctrl+Shift+Enter} now causes the following result to be displayed:

'33 = 3*(5+6)'

If you want to continue calculating with the result, delete the equal sign and the arithmetic operation and continue working in the same line.

The calculation steps can also be saved. To do this, enter [SPC + 2 3 4] (Chord s). The Activator Pro suggests a file name from the first characters, but you can change it as you wish before saving.

Calculation examples:

To add 19% VAT to a net price of 500 €:
'500+19% = 595'
To calculate the net price from the price with VAT:
'595/1.19 = 500'
To calculate the VAT at 19% for a net price of 500 €:
'500*19% = 95'
To calculate the actual price if you receive a discount of 5%:
'595-5% = 565.25'
It is also possible to divide a value by a percentage:
'20/5% = 400'
The following example shows the calculation accuracy of 15 digits:
'123456789/3.3 = 37411148.1818182'

5.3.16 Opening Additional Files

More than one file can be open within the Editor at the same time. There are two methods available for opening a file from within the Editor:

1. Within edit mode: The file can be edited after it is opened.
2. In read-only mode: The file is protected and cannot be edited.

Files may be opened from within the Editor as follows:

1. The {Ctrl + o} function opens a file which can then be edited. The Activator Pro will show: **'Open file:'**.
   Alternatively, you can open a file in read-only mode with {Ctrl + w}. This file cannot be modified. This is indicated by the prompt **'View file:'**.
2. Enter the name of the file to be opened in the input field. Please remember that the file name must be entered exactly as it is stored on the Activator Pro, otherwise the file is not found and cannot be opened.
3. After pressing [N5], the file will be opened.

If you do not know the precise file name, suspend the editor with {Ctrl + Space} (see chapter 5.2.18) and select the file from the file list.

There are several possibilities here:

- If the file name does not exist and you are opening the file in edit mode, the Editor assumes that you wish to create a new file under the name you entered.
- If you are attempting to open a file in read-only mode and the file name does not exist, the message **'File x not found'** will appear, where x is the file name entered.
- If you are opening an already open file, the Editor will simply switch to that file without reloading it.

5.3.17 Switching Between Open Files {Alt + Tab} or {Alt + Shift + Tab}

If you have several files open, you can switch between them with {Alt+Tab}. Let us assume you have opened three files in the following sequence: "a.txt" first, "b.txt" next and "c.txt" last. You are currently reading "c.txt". If you enter {Alt+Tab} now, you will switch over to the "b.txt" file. A message **'Current file:'** followed by the file name notifies you of the name of the file you have switched into. If you enter {Alt+Tab} again, you will subsequently be in "a.txt," the next time in "c.txt" again and so on. If you want to work or read the current file, you must first press [N5].

Using {Alt+Shift+Tab} allows you to switch between open files in the reverse order. This is even possible after closing a file, when the message **'Current file:'** appears.

Note: A file can only be transferred to the PC if it is not open in the Editor! Before it can be transferred, it must be closed and saved.

5.3.18 Suspending the Editor {Ctrl + Space}

You can temporarily suspend the Editor with {Ctrl + Space}, for example to change menu settings or check other states, or to delete a file. When you suspend the Editor, you will automatically return to the main menu, where all menu options are available to you. You can even enter PC Mode. The first few positions of the Braille display will show the symbol **'-E-'**. This is a reminder that the Editor is still open. It may be a little irritating that the menu items are only displayed following this symbol but it could be extremely annoying for you if you inadvertently lost data because you did not remember that the Editor was still open and that your data was not saved before switching off the Activator Pro.

To return to the Editor, enter {Ctrl + Space} again. It should be noted that you can only return to the Editor from the main menu.

IMPORTANT!!

Never attempt any file transfers with the Editor open or suspended. The active or suspended Editor utilizes certain regions of memory which are needed during file transmissions for processing data. Also, the transfer of certain files causes the Activator Pro to restart. Any open files would not be saved, and all changes would be lost.

5.3.19 Saving Files {Ctrl + s}

To save a file without closing it use {Ctrl + s}, you will then receive the following notification **'Save file:'** followed by the name of the file. If you have loaded this file into the Editor, this would be the name of the current file. If you created the file you are saving, the default file name will appear. This default file name is usually a suggestion made from the first few words at the beginning of the text. It can consist of up to 20 characters. If the Editor fails to generate a suggested file name, the default file name is **'untitled'**.

If you press [N5] now, the file will be saved. However, you also have the option of overwriting the given file name in part or entirely, if you want to save the file under a different name. If you do this, please remember the following:

- All changes to the file made after it was saved apply only to the file with the name you specified while saving it. If you save a file called "Text1.txt" under the file name "Text2.txt," you will be editing "Text2.txt" after the save. Therefore, if you want to save a file temporarily in its current state, you should proceed as described below.
- If you do not make any changes to the file name or if you enter a name that does not yet exist, the file will be saved without any further prompts when you press [N5].
- If you enter the name of an already existing file, the following prompt will appear: **'File x exists, overwrite (Y/N)?'**. You can either agree to overwrite the file by entering [**y**] followed by [N5] or decline, either by answering [**n**] followed by [N5] or by pressing [N2].
- A file name may not be longer than 255 characters and contain no special characters (:*?"<>|+,;=[]/\). The entire path including all the folders but not counting the file name may not be longer than 259 characters.

Please note: If you have marked a text block, this “save” function will not apply to the entire file, but only to the marked text block. This is indicated by the dialog **'Save block to file:'**, followed by the file name.

As mentioned above, if you want to save a temporary copy of your text under a different name in its current state, please proceed as follows:

1. Move to the top of the file with {Ctrl + Home}.
2. Set the beginning of a block with {Ctrl + Enter}.
3. Move to the end of the file by entering {Ctrl + End}.
4. Activate a save operation with {Ctrl + s}.
5. Enter the name under which you wish to store the current status of your file.
6. Press [N5]. The file will be saved but the new file will not be loaded.

As soon as you undo the block markings by pressing the [N2] key and activate the Save command again, the dialog described at the beginning of this chapter appears and the save operation now applies to the entire file again.

When a file is closed and saved, all marks set for that file as well as the current cursor position will be remembered. If a file is then transferred to a PC, edited on the PC and then retransmitted to the Activator Pro, the marks and current cursor position are no longer valid. In addition to the marks and the cursor position, the Activator Pro also notes the file's current size while saving it. When the file is opened again, the Activator Pro checks the size to see if it is the same as that recorded at the last save. If it is, the marks and the cursor position will be restored. If the current size deviates from the size noted before, the Editor assumes that the file has been modified on the PC in the meantime or that it is dealing with a file of the same name but different contents. In this case, the cursor will be positioned at the beginning of the file upon opening it and the bookmarks associated with this file will be discarded.

5.3.20 DirektTransfer of files or blocks of text to a connected device

If you want to transfer a text from the Activator Pro to a connected device (PC or mobile), you can do this quickly and directly from the Editor without the use of HTCom. It is important that the cursor on the connected device is placed into an input field, e.g. in an Editor.

If you have selected a text block and press {Ctrl + c}, the highlighted text block will be saved to the clipboard. Now switch to the device to which the text is to be transferred with the left special key. Now press the [QA] key to send the clipboard (by default [QA4] or {Fn + 4}).

5.3.21 Closing a File and Closing the Editor {Alt+F4} or {Ctrl + e}

Use {Alt+F4} or {Ctrl + e} to save and then close the current file.

If the file was modified, the Editor will ask: **'Save changes (Y/N)?'**

- **n**: The file is closed; changes are not saved.
- **y**: If the file is already named, it is saved under that name and closed. If it is a new file which does not yet have a name, the Editor tries to suggest an appropriate filename for unnamed files based on the first 20 characters of the first line or will propose **'untitled'**. You can either change or accept this name.

Please note:

1. The Editor is open until all open files have been closed.
2. Before you switch off your Activator Pro, all files that are open in the Editor must be saved and closed. Shutting down the Activator Pro while files with unsaved changes are open is not possible. Only if all changes are saved or discarded, you can switch off the Activator Pro.

5.3.22 Help {Ctrl + h}

Whenever you enter {Ctrl + h}, the Editor starts looking for the help file in the selected system language and opens it in read-only mode. This file contains the user manual. If there is no help file for the current language, the English help file will be opened as standard. Using either an incremental or buffered search, you can look up solutions to any problems, tips or key assignments. You cannot directly jump to any chapter; however, you can find the chapter you need quickly by moving to the beginning of the file, reviewing the Table of Contents and then executing an incremental or buffered search with the section number as the search string.

Please note: The help file opens in “Read Only” mode to prevent the accidental overwriting of important information. This means it is not possible to add your own notes to this file.

5.3.23 The Editor's Setup Menu {Ctrl + u}

The Editor provides a Setup menu, called up by entering {Ctrl + u}, which allows you to customize Editor functions to reflect your needs and habits. Some of the settings are global, i.e. the chosen setting applies to all files. Other settings apply only to individual files. The settings parameters for up to 20 files are stored individually when the files are properly saved. If you modify a file whose parameter settings have not yet been stored, the default setup parameters will be applied to this file. Before you save a new file, you should therefore adjust the values in the Setup menu according to your requirements. Each of the individual parameter descriptions below indicates whether that setting is global or valid only for individual files.

The Setup menu contains a list of parameters. You can navigate through the list by moving the cursor up and down with {Arrow up} and {Arrow down}. The desired parameter can be selected by pressing [N5]. Alternatively, you can also input the name of the parameter you wish to change then confirm with [N5].

Once you have selected a parameter with one of these two methods, a list of possible settings will appear. By navigating up and down through this list, you will find the available settings. Set that value by pressing [N5] and you will then return to the list of parameters. Instead of a list of settings, a field may also appear which is used to input numerical values or text. Again, the input must be confirmed by pressing [N5]. You can also return to the list of parameters without making any changes by pressing [N2].

The following subsections discuss each item on the Setup menu.

5.3.23.1 Window Scrolling (Global)

This value specifies by how many positions the display will be scrolled to the side when the cursor moves beyond the currently displayed text. Valid settings for this parameter are 0 through the number of Braille cells available (64/80). The default value is 3/4 of the available Braille cells. If you enter a value outside of the valid range, this will result in an error message.

This parameter can be used to obtain various effects. For example, you can enter 1; this causes the display to scroll with every character you enter that falls beyond the current display. In contrast, if you specify the highest possible value (64/80), the Activator Pro will react just like the older versions of Braille system software: the entire line will be rebuilt every time you move beyond it. If you move the cursor beyond the display towards the right, the cursor will appear at the first Braille cell. If you move the cursor beyond the display towards the left, it will appear on the last Braille position.

5.3.23.2 Scroll time (Global)

This option is relevant only when using ATC and can be set to a value in the range from 1 to 10. It determines how long the Activator Pro will wait before automatically scrolling to the next line of text. Lower values are better for skimming, while higher values prevent you from missing characters at the end of the displayed text. The default value is 3.

5.3.23.3 Indicate empty lines (Global)

For automatic scrolling with ATC it is necessary to mark empty lines. This allows detecting the reading finger even for blank lines. An empty line is indicated by three Braille cells, where all dots are set. By default, empty lines are not marked. If you want to use automatic scrolling, we recommend setting this option to "**Yes**".

5.3.23.4 Automatic scrolling (Global)

If this option is activated the Braille display will automatically scroll by ATC. ATC detects the position of your reading finger and scrolls on automatically, when you have read the last character displayed. When using automatic scrolling, we recommend also activating the option "**Indicate empty lines**" to be able to scroll on at empty lines.

5.3.23.5 Dialog Timeout (Global)

This value specifies the number of seconds you remain in any Editor dialog if you do not enter anything. If the specified time limit has been exceeded and no input was made, the dialog is closed without any changes being made or functions initiated. The valid settings are between 0 and 999 and the default is 100 seconds.

Note: It is not advisable to set the timeout value to less than 10, because then the dialog closes too quickly after being opened for you to have a chance to react to it or enter anything.

The timeout function does not apply to the setup menu itself. This would be undesirable, since you might not have the opportunity to enter any changes. In the setup menu, you therefore must always press [N2] to exit the menu.

5.3.23.6 Warn Timeout (Global)

This menu item determines the delay in seconds for displaying messages and warnings. Remember, you can quit a message at any time by pressing [N2]. If you press any other key while a message is being displayed, the timeout period is reset, and you have more time to read the message.

Possible values for this parameter are 0 through 999; the default here is 30.

Note: It is not recommended to set this parameter to less than 10 because in most cases this would not display the message long enough to read it.

5.3.23.7 Result Position

This option affects the calculator function of your Activator Pro. For the calculator function in the Editor, the position of the calculation result can be set. The letter [e] stands here for the setting in the Editor.

The possible settings are in each case:

- **Before Expression**: The result is displayed before the expression, for example: 5 = 2+3.
- **After Expression**: The result is displayed after the expression, for example: 2+3 = 5. This is the default setting for the Editor.

5.3.23.8 Keep Expression

This option affects the calculator function of your Activator Pro. For the calculator function in the Editor, you can set whether the entered calculation should be displayed together with the calculation result or not. The letter [e] stands here for the setting in the Editor.

The possible settings are in each case:

- Yes: The complete expression is displayed, for example: 5 = 2+3, taking the setting for the option "**Result Position**" into account.
- No: Only the result is displayed, for example: 5. The setting for the option "**Result Position**" has no effect in this case.

5.3.23.9 Find Exact (Global)

This parameter specifies how precisely a search string must match the search term during searches (does not apply to replacing). There are two possible settings:

1. If you set **Find Exact** to **'Yes'**, the search term must be entered with the same capitalization to be found in the text. For example, if you enter the search string "Table" capitalized, the same word without the capitalization, "table," will not be found.
2. If you set this parameter to **'No'**, words with upper- and lower-case letters will still be found, even if you only enter lower case letters.

Please Note: If the option **Find Exact** is set to **'No '** and your search term contains umlaut or special characters, the Editor will only find the upper- and lower-case equivalent of the character if the standard character set is active. The standard character set is "ANSI Latin1". If you are not using the standard character set, an umlaut or special character will only be found in the exact format in which you entered it (either upper or lower case). As a default, this option is turned off.

5.3.23.10 Margin Action (Global)

You can choose one of three different types of actions when the right edge of the display is reached within the Editor:

- **None:** No action.
- **Bell:** Emit a beep, depending on the settings for signal tones.
- **Wrap:** Look for the beginning of the word currently being typed and wrap it to the next line. A beeping signal is also emitted. The default setting for Margin Action is "**None**".

5.3.23.11 Right Margin (Global)

To facilitate text input, you can specify a right margin. Possible values are 0 to 32767 with the default value set to 75. The previous option "**Margin Action**" determines what the Editor will do when the right edge is reached.

5.3.23.12 Word Wrap (Global)

For this parameter, you can choose either “**Yes**” or “**No**”. “**Yes**” means that a word that does not fit completely on the end of the Braille display is suppressed, if the cursor is not located in the currently displayed line. If the cursor is not in the current line of text, the word will be displayed in part and then again completely after the display was scrolled by using the reading keys.

If word wrap is turned off (set to “**No**”), as many letters of the word as possible are displayed on the Braille elements. The default setting is “**Yes**”.

Note: This word wrap function applies only to the reading of text; it is not active while entering text.

5.3.23.13 Tab Mode (Global)

This setting determines which characters will be inserted by the Editor when you input a tab character. Two options are available:

- **Tabs (\t)**: Preferably, tab characters will be inserted, but this depends on the currently active setting for **'Tab Stops'** (see next section). This option is especially useful if you desire to keep your files as compact as possible.
- **Blanks**: For each tab character, the number of spaces specified under **'Tab Width'** will be inserted into the text. This option is appropriate if you want to ensure that a file is formatted exactly like it was on the Activator Pro once it has been transmitted to your word processing program on the PC. The disadvantage here is that you cannot delete the tab character with one keystroke. All the spaces inserted for the tab must be deleted individually.

Remember, the representation of tab characters on the Braille display is always by several spaces, regardless of the option specified in Tab Mode.

5.3.23.14 Tab Stops (Global)

Valid arguments for this value are from 0 up to the maximum number of positions on your Activator Pro (40). If you specify 0, either a tab character or the number of spaces set under **'Tab Width'** (see next section) will be inserted into the text each time you input the tab character, independent of your position within the text. Any value greater than 0 results in the current line being filled up with either tab characters or spaces in such a way that a tab stop is set at every n^{th} position (e.g. every 5^{th} position).

The following example will clarify this parameter:

Supposing that you have set **'Tab Stops'** to 5 and the cursor is located at column 1, then the cursor will move to column 6 as soon as you enter a tab character. If you enter a tab again, you will be in column 11 and so on. On the occasion that you type a word here consisting of 7 letters and then enter tab from that position, which would be column 18, then the cursor will move to column 22.

5.3.23.15 Tab Width (Global)

This parameter determines the number of spaces used for displaying a tab on the Braille display. It also specifies the number of spaces used to represent a tab character that is entered on the Activator Pro if the option **'Tab Mode'** is set to "**Blanks**". Valid entries for this setting are 1 through the maximum number of cells available on the Activator Pro (64/80). The value in this menu item affects all tabs in each file. In other words, you cannot set a tab width of 4 characters in one place and a tab width of 32 characters at another place within the same file. Whenever you open a file for the first time or create a new file, the default setting of 4 spaces applies.

Note: When a file is transferred to the PC, tab characters will not be replaced by the number of spaces specified for that file, but instead will be transmitted as tab characters. If you open the file later on the PC in a word processing program, the tab characters may be handled in

several different ways. Many programs convert tab characters into a number of spaces that is a multiple of 2 (e.g. 4 or 8). Others display tab characters without converting them at all or provide several options for conversion. Please consult the documentation for your word processing program for details.

5.3.23.16 Line End (Individual File)

This menu item provides three options for representing the end of a line when you save a file to the flash disk. The following displays are available:

- Carriage return with line feed, CRLF (\\r\\n, ^M^J) used by DOS and Windows.
- Carriage return only, CR (\\r, ^M) used by Macintosh OS.
- Line feed only, LF (\\n, ^J) used by Unix-based operating systems.

In the case of files transmitted to the Activator Pro, this setting is obtained from the file itself and cannot be changed. However, you can specify this parameter for all files created on the Activator Pro.

5.3.23.17 Insert Cursor (Global)

Here you can specify the form the cursor should take in insert mode. This means you also specify the cursor shape in overwrite mode at the same time, since the overwrite cursor always takes the shape not chosen for the insert cursor. The two cursor formats are: an underline “**Underline**” or a block “**Block**”. Both shapes are blinking cursors and that feature cannot be changed.

5.3.23.18 Edit Mode (Individual File)

Dependent on which mode (edit or view) you opened the current file, you find one of this three settings:

- **Insert:** All text input is inserted at the cursor position, the existing characters in the file are not deleted.
- **Overwrite:** The characters existing at the cursor position are overwritten by the input characters.
- **Read Only:** The file cannot be modified. Any commands that would modify the file generate beeps, on the assumption that acoustic output is activated in the **Options** menu.

If the file was opened for editing, you can choose between the settings “**Insert**” and “**Overwrite**”. You can also change the edit mode by pressing {Insert} without opening the menu.

Please note that you cannot switch back from read-only mode once it has been selected while the file is still open. Whenever you do wish to turn off read-only mode, you must quit the file and then open it again — either from the Editor or from the file list. You can then change the **Edit Mode** in the setup menu.

5.3.23.19 Scroll Speed (Global)

This setting allows you to pre-set the speed for automatic reading mode. You may choose any value from 1 to 10, where 10 is the slowest. The default value is 5.

5.3.23.20 Saved Position (Individual File)

Since the cursor does not move during automatic reading, two options are available here for how the cursor is saved when the file is closed:

- **Cursor:** This is the default. The current position of the cursor is saved and when the file is opened again, the cursor will be at that position.
- **Display:** The cursor will be on the line that was last displayed when the file was closed.

5.3.23.21 Display Mode (Individual File)

This item allows you to choose one of several modes of display:

- **Text Only**: Special characters are represented by a period, control characters by ^ with the appropriate letter (e.g. ^d for return).
- **Special**: Special characters are displayed in hexadecimal representation (e.g. 0xfd for 253).
- **Normal**: All characters are displayed according to the currently active character set.

The default setting for this parameter is “**Normal**”.

5.3.23.22 Step Size (Global)

This parameter specifies by how many characters the display moves when the reading keys are used. Valid arguments are from 1 to the maximum number of Braille cells available on the Activator Pro (64/80). The default setting is the highest value possible. It should be remembered that the setting specified in the "**Word Wrap**" parameter (see chapter 5.3.23.12) also influences the movement of the display.

5.3.23.23 Match Column (Global)

This setting contains the value for the position on the Braille display where a found search term will be displayed. Here the valid settings are between 0 and the maximum number of Braille cells available on the Activator Pro (64/80), but both 0 and 1 refer to the first Braille module. The default setting here is always the center of the display (32/40).

This function allows you to view the search term within its context. Depending on whether the text just before or after the found term has priority, you can position the column for the match further to the right or left on the display. Positioning the matching search term at the match column occurs whenever the matching term in the text appears to the right of the match column.

If we assume that you have set the match column to position 25, and you are searching for the word "Help" being it found at column 36, then the Editor adjusts the display on the Activator Pro in such a way that the word "Help" is shown beginning at the 25th cell on the Braille display. Assume further that you search for the word "Help" again and that it is located at column 10 in the text. This time the Braille display will not be adjusted, because the word appears to the left of the match column.

5.3.24 Important Instructions Regarding the Editor

The Editor's powerful features provide a comfortable, high-performance tool for you, but at the same time, it is important to handle it properly. This chapter contains many useful tips for using the Editor.

1. Handling of files:
   - Always save your files to the PC regularly. This not only prevents the loss of important data, but it will also enable you, if necessary, to delete one of your unedited files, if you need to free up some memory.
   - While working with large files, such as manuscripts or lecture notes, the available memory may not be sufficient for writing the edited file. If you are not making changes within the entire document, but only adding text to the end of the large file (e.g. a new chapter or your notes for the most recent lecture), you can circumvent this problem by creating a new file and writing your continuation there, while keeping the larger file open in read-only mode. This way, all the information is available to you, and it is more likely that you will be able to save the additional texts. Later, you can open both files in edit mode and attach the contents of the new file to the larger file by using the appropriate block operations. If you find that you cannot save the file after having attached the additional notes, you can transfer both files to the PC, concatenate them there and then retransmit that file to the Activator Pro.
   - The Editor determines while you are working whether there is enough memory left for saving the changes you are entering. Should this not be the case, the Editor will notify you. If you have opened and edited several files, you can increase the available memory by first attempting to save and close smaller files. If you succeed, you will then be able to also save and close larger files. Another possibility is to suspend the Editor in order to delete any files not immediately needed. However, the prerequisite for this procedure is that you regularly save your data to the PC. Remember that a file cannot be deleted if it is open in the Editor. Close the file before suspending the Editor if it is open.
   - One of the files needed by the Editor is the "$clipboard$" file. This file, if it exists, is deleted when the Activator Pro's power is turned on to provide as much memory as possible for your data, but you can also delete it while working within the Editor. You can do this by suspending the Editor and deleting this file from the file menu. Please note, however, that you will not receive any special warning other than the standard dialog when deleting this file. You should therefore delete the clipboard only if you are sure that you will no longer require its contents. Again, only files that are not currently open can be deleted.
   - When you attempt to open an editable file with {Ctrl + o} or via the menu item **'Edit ctrl+o'** from the file list, the Editor will check whether enough memory is available for editing the file. Should this not be the case, the file will be opened in read-only mode and a message will be issued. Granted that there is enough memory left for managing the appropriate pages, a file can always be opened in read-only mode, because no swap file needs to be created to keep track of changes.
2. Block operations may cause a slowdown of the Editor when working with large amounts of data. This means that you may have to wait a little until a block has been either, copied, cut or pasted, if you are working with very large amounts of text. Navigation within the Editor may slow down in the case of very long lines.

5.4 Braille input with the Braille keys in the screen reader

In combination with the screen reader, it is possible to make Braille commands on the PC using the Braille keys on the Activator Pro. To do so, switch on Braille input with the [Braille] key (see chapter 3.3.2 Braille input and Chord).

You can activate and deactivate the PC control separately. This is necessary because the Braille keys of the Activator Pro are used to control the PC as well as to trigger screen reader functions. The following functionalities are available here:

- Turning PC control on and off
- Input of characters
- Use of the control key (Ctrl), including for keyboard shortcuts: One example is the copy function which is {Ctrl+c} on a PC keyboard
- Use of the Alt key, including for keyboard shortcuts: One example is activating the menu bar under Windows programs
- Triggering the "Windows" and "Context" keys
- Triggering the Enter key
- Triggering the Escape key
- Triggering the Backspace key
- Triggering the Delete key
- Moving the cursor
- Triggering the Home and End keys
- Triggering the Page Up and Page Down keys
- Triggering the Shift key: One example is entering Ctrl+Shift+f
- Caps lock, for example in order to select blocks
- Initiating the function keys, including in combination with Ctrl, Shift and Alt. This means it is possible, for example, to close certain windows or entire applications via function keys.

5.4.1 Table of Key Commands for Controlling the PC

The key combinations for controlling the PC are listed below in the form of a table. We have included as many combinations as possible; however, if a combination is not shown it does not mean it is not possible. All key combinations with [SPC] can either be pressed with [SPCL] or [SPCR].

Key combinations are represented by the plus sign (+), e.g. Ctrl+Alt+a. Consecutive keystrokes are separated by a comma. The cursor routing keys are abbreviated as CR (e.g. CR12 = cursor routing key above Braille cell 12).

Please note that you can also execute individual Braille commands with the Fn key without switching to Braille input mode, e.g. Chord B {Fn + Spacebar + f + d + a)

PC Key(s)	Chord Commands	Emulated on the Activator Pro by
Activate/deactivate PC control	Chord B	SPC + 1 2 7
Backspace	Chord b	SPC + 1 2 or 7
Delete		SPC + 4 5

PC Key(s)	Chord Commands	Emulated on the Activator Pro by
Paste	Chord i	SPC + 2 4
Alt		N5 + SPC
Alt + character		N5 + character
Alt for next character		SPC + 7 8
Activate/deactivate Alt		SPCL + SPCR + 7 8
Enter		8 or N5
Ctrl + character		N2 + character
Ctrl for next character		SPC + 3 6
Activate/deactivate Ctrl		SPCL + SPCR + 3 6
Tab	Chord t	SPC + 2 3 4 5
Shift + Tab	Chord T	SPC + 2 3 4 5 7
Ctrl + Tab		N2 + SPC + 2 3 4 5
Ctrl + Shift + Tab		N2 + SPC + 2 3 4 5 7
Escape	Chord e	SPC + 1 5 or N2
Shift + Escape	Chord E	SPC + 1 5 7
Ctrl + Shift + Escape		N2 + SPC + 1 5 7
Shift + character	Chord s	SPC + 2 3 4, character
Caps Lock on/off	Chord S	SPC + 2 3 4 7
Cursor keys		Up: SPC + 1, Left: SPC + 7, Down: SPC + 4, Right: SPC + 8
Mark	Chord S	SPC + 2 3 4 7 "holds down" the shift key until SPC + 2 3 4 7 is input again. It is therefore possible to work with all cursor movements, such as Home, End, etc. If you wanted to mark two characters to the right of the cursor, you would enter SPC + 2 3 4 7, SPC+8 (cursor right) twice and SPC + 2 3 4 7 again
Previous word (Ctrl + Cursor left)		SPC + 3
Next word (Ctrl + Cursor right)		SPC + 6
Page Up		SPC + 2
Page Down		SPC + 5
Ctrl + Page Up		N2 + SPC + 2
Ctrl + Page Down		N2 + SPC + 5
Home	Chord k	SPC + 1 3
End		SPC + 4 6
Ctrl + Home	Chord l	SPC + 1 2 3
Ctrl + End		SPC + 4 5 6
Function Keys F1 to F12		SPC + CR1 to CR12
Left Windows Key	Chord w	SPC + 2 4 5 6
Context Key	Chord W	SPC + 2 4 5 6 7
Windows Key + character		SPC + 2 4 5 6 8 followed by character
Activate/Deactivate Windows Key		SPCL + SPCR + 2 4 5 6 8

PC Key(s)	Chord Commands	Emulated on the Activator Pro by
PAUSE key	Chord p	SPC + 1 2 3 4
Windows key + PAUSE key		SPC + 2 4 5 6 8 followed by SPC + 1 2 3 4
Space		SPCL or SPCR
Screen Reader Key + character		SPC + 2 3 4 8 followed by character
Activate/Deactivate Screen Reader Key		SPCL + SPCR + 2 3 4 8

6 The Computer Keyboard

The Activator Pro is equipped with a standard computer keyboard. With tactile touch bars for better orientation, the keys f and j, 6 and the key 5 on the number pad are marked.

The keyboard consists of 7 rows in total, with the top two rows consisting mainly of function keys. At the top left – slightly separated from the other keys – is the Escape key. To the right of it are a total of four blocks with keys.

In the top row there are, from left to right: [F13] to [F24], special key left area, special key right area (ActiveSplit), Braille key to turn Braille input on/off.

The second row begins with Escape, followed by [F1] to [F12], Print, Scroll, and Pause.

The five rows below represent a normal computer keyboard. The first key below the escape key {Esc} is the NOT-key. Next to it are the number keys 1 to 9, 0, -, + and the wider backspace key follow. To the right of the Backspace key is a keypad of 6 with (from top left to bottom right) Insert, Home, Page Up, Delete, End, and Page Down.

Below the block of 6 you will find the arrow keys. To the right of it is the number pad, which contains another enter key at the bottom right.

In the bottom row of the keyboard, on the left you will find Ctrl, Windows key, Alt, Spacebar, AltGr, Fn, context menu, Ctrl.

6.1 The Function Keys F13 to F24

The top row of function keys can be freely assigned to any functions that you often use for your daily work and thus want to perform quickly. You can use it to set functions such as starting applications, screen reader functions or executing scripts from screen readers.

For example, if you want to set the Firefox application to [F13], open the properties menu in the Firefox context menu on your PC. Select "Map Keyboard Shortcut" and press [F13].

Note: There is a bug in Windows that does not show the mapping of these keys. However, the mapping has been done correctly and you can now quickly launch Firefox by pressing [F13].

Here's another example of how to assign the StartOrEndTandemSession JAWS script to the [F13] key:

1. Open the JAWS keyboard manager with {Insert+8}
2. Load the Default.jkm with {Ctrl+Shift+d}
3. Use {TAB} to navigate to the script list
4. Navigate to the StartOrEndTandemSession script
5. Press {Ctrl + a}
6. In the focused input field "Add/Assign key to", press [F13]. The JAWS speech output reports "F13".
7. Use {Shift + Tab} to navigate to the "OK" button and confirm it.
8. The dialog "Confirm adding the keyboard shortcut" should open with the following message:
9. "Do you really want to change default.JKM?" Yes/No/Cancel

10. If you confirm this message with "yes", the script is successfully assigned to the [F13] key.

6.2 The Three Blue Special Keys

Left special key (left arrow with dashed line and vertical line): Switches between the internal menu mode and the connected devices, which are called channels, in turn: first menu mode, then device on the left USB port, device on the right USB port, then up to 3 Bluetooth devices. If ActiveSplit is activated, a 2-second press ends this mode and the device that was displayed in the left area takes over the full length of the Braille display. See also Chapter 3.3.1 Switching between connected devices.

When ActiveSplit (Chapter 4.1.1 ActiveSplit) is activated, the left special key changes the channel for the left Braille display area.

Important: To switch to internal menu mode, ActiveSplit must be disabled.

If **Mass storage** is active, it is terminated by pressing the left special key.

Middle special key (right arrow with dashed line and vertical line): Activates the ActiveSplit function. The Braille display is divided into two areas that can be used to operate two different devices at the same time. The ATC sensors in the Braille display detect which device is currently being read on and the keyboard automatically operates this device. This means that there is no need to switch, but the Activator Pro automatically recognizes which device is currently to be operated.

If you press the left and middle special keys together, the two areas are swapped without changing the size of the areas. This means that the divider remains in the same position of the two Braille areas.

To exit ActiveSplit, press this key for more than two seconds. The device, which was controlled via the right area, takes over the entire Braille display. See also Chapter 4.1.1 ActiveSplit.

When ActiveSplit (Chapter 4.1.1) is activated, the middle special key changes the channel for the right Braille display area.

Important: To switch to internal menu mode, ActiveSplit must be disabled.

If **Mass storage** is active, this key has no function.

Right special key (Braille): With the Braille key you can turn Braille input on and off. As soon as Braille input is activated, the blue keys asdf and jkl; as well as the space bar can only be used for Braille input. You can use these to enter text and Chord commands. To avoid accidental mistyping, Braille input mode also locks a number of keys that surround this area with the Braille input keys. This applies to the keys Q to P in the fourth row and the keys Y to – in the sixth row. See also chapter 3.3.2 Braille input and Chord Commands.

7 The Activator Pro as a Braille Display

The Activator Pro is supported by various screen reading programs, such as:

- JAWS
- NVDA
- VoiceOver (iOS)
- TalkBack (Android)

If these programs are used, all the Activator Pro's functionalities are assured.

7.1 Starting the Screen Reader

The screen reader can be started directly via the computer keyboard of the Activator Pro. We recommend using an easy-to-remember keyboard shortcut. During the installation of NVDA, you have, for example, also the possibility to set the keyboard shortcut {Ctrl + Alt + n} directly for starting the screen reader.

Unfortunately, such a possibility does not exist during the installation of JAWS. However, after installation, you have the option of defining your own key combination via the context menu of the JAWS shortcut on your desktop. To do this, open the Properties menu via {Alt + Enter} and then switch to the "Keyboard shortcut" input field in the "Shortcut" tab.

Via the context menu, you also have the option of setting up the start of the screen reader via one of the function keys of the Activator Pro. For example, if you want to set the start of JAWS to [F24], press the [F24] key in the "Key combination" input field. After you have applied the change, JAWS can now be started with [F24].

7.2 Screen readers using Windows: Example JAWS

The functionality of JAWS for Windows is so extensive that only the basic functions for operating the Braille display can be described in brief in this section.

The status cells of a Braille display contain important data regarding screen positioning. Since your Activator Pro does not include status cells, you can use [SPCL+SPCR] to toggle between displaying the contents of the screen and the status cells. The first three status cells indicate the cursor's pixel position within the line. The fourth status cell indicates which mode is currently active, as follows:

- p for PC cursor
- j for JAWS cursor
- s for structured mode

Dots 7 and 8 of the status cells show the Braille display's position in a window line. They have the following meanings:

1+2+3+4:	The entire window line is shown on the Braille display
1+2:	Left half of the window line
3+4:	Right half of the window line
2+3:	There is more text on the left and right in the window line

7.2.1 Overview

Here you will find the functions assigned to the individual keys of the Activator Pro listed in a table. Since JAWS for Windows comes with its own user manual, we have refrained from providing a detailed description of the functions.

To do this, switch to Braille input mode with the Braille key (see Chapter 3.3.2 Braille input and Chord Commands).

Control Key/Braille Dot	Function
[7]	Activate PC cursor tracking.
[3]	Display the first line in the window (title).
[2]	Move the Braille display to the left.
[1]	Move the Braille display section one line up without changing the horizontal position.
[SPCL]	If there is any text to the left of the Braille display section, it moves to the left, if not, it moves one line up and moves the cursor.
[SPCR]	If there is any text to the right of the Braille display section, it moves to the right, if not, it moves one line down and moves the cursor.
[4]	Move the Braille display section one line down without changing the horizontal position.
[5]	Move the Braille display to the right.
[6]	Display the last line in the window.
[8]	Drag the JAWS cursor to the PC cursor and activate the JAWS cursor.
[N1/N4]	If there is any text to the left of the Braille display section, it moves to the left, if not, it moves one line up.
[N3/N6]	If there is any text to the right of the Braille display section, it moves to the right, if not, it moves one line down.
[SPCL + SPCR]	Toggle status cells on and off.
[7 8]	Switch between structured mode, section output and speech output.
[3 8]	Change cursor representation (dots 7 and 8, all 8 dots, blinking and non-blinking).
[2 8]	Toggle between 6/8 dot Braille.
[1 8] or [N1+N6]	Help Tech configuration dialog (starting from Handy Tech JAWS Driver version 3.x)
[4 8]	Toggle between focused text on Braille display/same text as on screen.
[5 8]	Activate the JAWS cursor.
[2 3]	Beginning of line
[5 6]	End of line
[1 2 3]	Top of file
[4 5 6]	End of file
[3 6 7]	Speech interruption on/off
[3 6 7 8]	Output task bar
[N2]	Tab
[N5]	Shift + Tab

Control Key/Braille Dot	Function
[N2 + N5]	Enter
[SPC + 1 2 7]	Toggle Braille input on/off
[SPC + 1 7]	Toggle ATC on/off
[SPC + 1 2 3]	Toggle ATC reading protocol on/off
[SPCL + 1 2 3 7]	If there is any text to the left of the Braille display section, it moves to the left, if not, it moves one line up.
[SPCR + 4 5 6 8]	If there is any text to the right of the Braille display section, it moves to the right, if not, it moves one line down.
[SPCL + SPCR + 1 2 3 7]	Move the Braille display section one line up.
[SPCL + SPCR + 4 5 6 8]	Move the Braille display section one line down.

By entering letters in Braille, you can execute the so-called mnemonic commands that are listed below:

j	[2 4 5]	Activate the JAWS settings menu
%	[1 2 3 4 5 6]	Activate the screen reader settings menu (JAWS)
d	[1 4 5]	Desktop, minimizes all applications
h	[1 2 5]	Activate JAWS Help (paste + F1)
$	[4 6]	Tab
k	[1 3]	Shift Tab
g	[1 2 4 5]	Contracted Braille on/off
m	[1 3 4]	Alt for activating the menu bar
s	[2 3 4]	Start menu
+	[2 3 5]	Toggle 6/8 dot Braille
=	[2 3 5 6]	System Tray
z	[1 3 5 6]	Announce time
|	[3 4]	Status cells on/off
c	[1 4]	Ctrl+Tab
C	[1 4 7]	Shift+Ctrl+Tab
e	[1 5]	ESC
?	[2 6]	Enter
b	[1 2]	Braille cursor tracking on/off
f	[1 2 4]	Active cursor tracking on/off
v	[1 2 3 6]	Set level of Braille contractions

The cursor routing keys (CR) are used to directly place the cursor at that text position. In addition, the following functions can be initiated by activating cursor routing keys in combination with certain control keys:

[CR + 1] or [CR + 4]	Mark a text block (beginning and end of block)
[CR + 6]	Describe object at the CR position
[CR + 8]	Right mouse click at the CR position
[CR + N1/N4] oder [CR + N3/N6]	Describe the font

If the four status cells are in use on the Braille display, the CR keys above the status elements (S1 through S4) have the following functions:

[S1]	Toggle attribute / text mode

[S2]	Change attribute representation, underlined with dots 7+8
[S3]	Toggle unconditional / conditional cursor tracking
[S4]	Toggle active cursor tracking on/off

7.3 VoiceOver: Screen reader for Apple iOS Devices

The Activator Pro can be controlled directly from the screen reader VoiceOver, which is installed by default on the iPhone, iPad and Mac . How to connect the Activator Pro to the iPhone via Bluetooth is described in chapter "2.4.2 Bluetooth Apple iOS Device Tie-In".

After starting VoiceOver, the content of the VoiceOver cursor is displayed on the Braille display of the Activator Pro, which is also visually highlighted by a frame on the display of your iOS device. With [SPC + 4] you can jump to the next element, with [SPC + 1] you can jump back. When pressing a CR key over a letter of the name, the icon is activated or the application is opened. For example, when you open notes, you can enter text at the current cursor position with the Braille keyboard of the Activator Pro. With [SPC +1 2 5] you can get back to the home screen from anywhere.

In the following table you will find the key commands for operating the Apple iOS device using VoiceOver:

Control Key/Braille Dot	**Function**
[SPC + 1]	Move to previous item
[SPC + 4]	Move to next item
[SPC + 3]	Move to previous item using rotor setting
[SPC + 6]	Move to next item using rotor setting
[SPC + 2 3]	Select previous rotor setting
[SPC + 5 6]	Select next rotor setting
[SPC + 3 6]	Activates the selected object
[SPC + 1 2 5]	Activates the Home button
[SPC + 1 3 5]	Scroll right one page
[SPC + 2 4 6]	Scroll left one page
[SPC + 1 4 5 6]	Page down
[SPC + 1 2]	Activates the Back button if present
[SPC + 1 2 3]	Move to the first element
[SPC + 4 5 6]	Move to the last element
[SPC + 2 4 5 6]	Read page starting at the top
[SPC + 1 2 3 5]	Read page starting at selected item
[SPC + 2 3 4]	Goes to the status bar
[SPC + 3 4]	Speak page number or rows being displayed
[SPC + 4 7] iPad only	Move to next container
[SPC + 1 7] iPad only	Move to previous container
[SPC + 4 or 5]	Moves through the list
[SPC + 2]	Pan Braille to the left
[SPC + 5]	Pan Braille to the right
[SPC + 1 2 3 4]	Pause or continue speech
[SPC + 1 3 4]	Toggle speech on and off
[SPC + 1 2 3 4 5 6]	Toggle Screen Curtain on and off
[SPC + 2 3 6]	Toggle between 6-dot and 8-dot Braille

Control Key/Braille Dot	Function
[SPC + 1 2 4 5]	Switch between contracted and uncontracted Braille
[SPC + 3 4 5]	Activates the Volume Up button
[SPC + 1 2 6]	Activates the Volume Down button
[SPC + 1 2 3 4 6]	Set label
[SPC + 1 3]	Keyboard help
[SPC + 2 3 4 5]	Activates the Tab key
[SPC + 1 2 5 6]	Activates Shift Tab
[SPC + 1 5]	Activates the Return key
[SPC + 8]	Activates the Return key
[SPC + 1 4 5]	Activates the Delete key
[SPC + 7]	Activates the Delete key
[SPC + 2 5 6]	Select text
[SPC + 2 3 5]	Deselect text
[SPC + 1 4]	Copy
[SPC + 1 3 4 6]	Cut
[SPC + 1 2 3 6]	Paste
[SPC + 1 3 5 6]	Undo
[SPC + 1 4 6]	Activates the Eject key

In the following overview you will find shortcut keys for the operation of the Apple Internet browser Safari:
H: jump to next heading
1 to 6: Headings from 1 to 6 can be jumped to directly
L: jump to next link
S: jump to next text
W: jump to next landmark
R: jump to the next input field
X: jump to the next list
T: jump to the next table
M: jump to the next element of the same type
I: jump to the next image
B: jump to the next button
C: jump to the next form element
You can find the complete list of Braille commands for VoiceOver at
https://support.apple.com/en-en/HT202132

8 Operation Settings for Help Tech Braille Displays

Various settings for operating your Activator Pro with the PC and your screen reader can be made in the universal Help Tech Braille driver. To open the settings window, press [1 8] if Braille input is activated or {Fn + f + ö} if Braille input is deactivated. Alternatively, you can also press the [N1] and [N6] keys together.

There are the following six tabs in the Settings window:

- Connection
- ATC
- Status Cells
- Key Actions
- Miscellaneous
- Info

Your changes in settings from different tab sheets will be saved by pressing the OK or Apply Button. If you choose the OK Button, the dialog will be closed.

The following sections provide more details about the settings that are available under these six tabs.

8.1 Connection

The checkbox "Activate Driver" is checked to enable your Activator Pro to be used by the screen reader. If you uncheck this box, the driver will be deactivated, and you will not be able to operate any Help Tech Braille display.

The field "Device Detection" provides two options: "Automatic" means that your screen reader will detect the Braille display regardless of the interface through which it is connected to your PC. The second option is to specify a fixed interface at which the screen reader should look for the Braille display. In the corresponding combo box, you can choose one of the existing COM interfaces or the USB interface.

The field "Show Pop-Up Braille Display Information" allows you to specify whether you want to be informed which Braille device is connected to which of your PC's interfaces at the start-up of the screen reader. If this setting is activated, there will be a small dialog during start-up containing the Braille display driver's version number, any detected Braille displays and the interface designation.

You have the following three options:

- When changing device or interface: The dialog appears only if you have connected a different Help Tech Braille display to the PC or if you have connected the same Braille display to a different interface on your PC.
- Never: The dialog will not be displayed during start-up.
- Always at start: Every time your screen reader starts up, the dialog will be displayed.

If the checkbox "Connect Braille display even when switched on after start up" is checked, the Braille display may be connected to the computer while the screen reader is already running, and the Braille display will be recognized. The default setting for this checkbox is unchecked.

Checking the checkbox "Reconnect Braille display automatically when disconnect" instructs the screen reader to search for the Braille display in brief intervals if there has been a

disconnection. For example, if you turned off the Braille display in order to remove the keyboard or to plug in the power cable, the screen reader will continuously search for a Braille display until you turn the power back on. By checking the checkbox "Notify when searching for connection" you can cause the screen reader to inform you of this process. If you do, you will receive the message e.g. "Searching Activator Pro" in short intervals.

8.2 ATC

The Activator Pro's integrated ATC technology detects your reading position on the Braille display which allows for innovative features in the operation and control of the PC. This tab is shown only if your screen reader supports the ATC functions through the Help Tech Braille display driver.

ATC functionality is so extensive that we have dedicated a separate section to the ATC features. Please review the settings available under this tab in the next Chapter 9, Active Tactile Control (ATC).

8.3 Status Cells

The so-called status cells on your Braille display are used to indicate where your current position is on the screen, for example, within a menu or within a text field. Exactly what information is shown on the status cells depends on the screen reader. Under the "Status Cells" tab you can specify some of the options for these status cells yourself.

The field "Device" allows you to specify which Help Tech Braille system or device you are using. By default, the currently connected device is recognized and becomes the default setting here. This setting also provides you with the option of configuring other Help Tech Braille displays, even though they are not currently connected to the computer.

In the next field, you may specify the size of the status display section. As a default, four Braille elements are used as status cells. There is one blank position automatically inserted between the status cells and the remaining positions on the Braille line. The blank element has no function.

The field "Position of status cells" allows you to determine whether the status cells should be displayed on the left or right side of the Braille line. As a default, they are displayed on the left.

The checkbox called "Display status cells" lets you enable and disable the status display. The status information is not displayed by default. There is a quicker method for enabling and disabling the status display: pressing [SPCL + SPCR] simultaneously. When you use this method, you do not need to open the Settings menu.

8.4 Key Actions

This tab sheet allows you to adjust the behaviour of each key of your Activator Pro on press in the following three different ways:

- Key Lock: Keys defined as locked will be ignored when pressed.
- Fast Keys: Keys defined as fast keys perform their action already when pressed and not – as usual – when released.
- Repeat Keys: Keys defined as repeat keys will repeat their action continually while be pressed.

8.4.1 Key Lock

Single keys of the Activator Pro can be locked to prevent the unintentional functions by accidental key presses. This is helpful when starting to learn how to use the Activator Pro.

With the checkbox “Use Key Lock“, you can activate this function. The button “Locked Keys…” will open the dialog “Define locked keys for device”. In the list box “Device” the connected Braille display is already preselected. In the list box “Available keys” you can choose the keys to be locked. With the “Add” button you move the selected key into the list box “Locked keys”. The “Remove” button moves the key back to the available keys. By default, no keys are locked.

8.4.2 Fast Keys

Fast keys, also known as hot keys, refer to keys that execute the function associated with that key as soon as the key is pressed, as opposed to when the key is released. If one of the keys to be used in a key combination is a fast key, the fast key must therefore be pressed last.

The checkbox "Use Fast Keys" is used for enabling this function. The button “Fast Keys…” will open the dialog “Define Fast Keys for device”. In the list box “Device” the connected Braille display is already preselected. In this dialog, you can then select the keys you want to define as fast keys from the list box "Available keys" and move them by pressing the “Add” button into the list box “Fast Keys”. By default, no keys are defined as fast keys. There are no fast keys available for Braille input.

8.4.3 Repeat Keys

With the settings under "Repeat Keys" you can specify the repeat interval at which a function initiated by a key is repeated when that key is continually pressed. This feature makes it easier, for example, to navigate through a list, because you do not need to keep pressing the forward or backward key for each item in the list. You can instead keep holding down that key until the cursor is at the desired item.

The checkbox "Use Repeat Keys" is used for enabling this function. The default setting is that key repeats are disabled. The button “Repeat Keys…” will open the dialog “Settings for repeat keys”. In the list box “Device” the connected Braille display is already preselected. In this dialog, you can then select the keys you want to define as repeat keys from the list box "Available keys" and move them into the list box “Repeat Keys” by pressing the “Add” button. For the Activator Pro the keys [1], [4], [N1], [N3], [N4] and [N6] are pre-set with a default repeat interval of 500 milliseconds, if you activate key repeats. There is no key repeat available for Braille input.

8.5 Miscellaneous

In the “Miscellaneous” tab, you can among other options adjust the dot firmness and specify whether your actions should be logged in a protocol file. The protocol function is useful when you need Technical Support. Please check this box only when asked to do so by your customer service representative. You will then also be able to specify where this protocol file should be saved in the field called "Protocol file".

The checkbox "Quick Entry in PC mode by Dot 7 as Back Space and Dot 8 as Enter" controls whether the [7] key is to function as a Backspace key during Braille input and the [8] key as

Enter. If you want to disable this option, you can do so by unchecking this box which is checked by default.

8.6 Info

In the ”Info“ tab sheet you find important information about your Activator Pro and the driver software you are using.

In the field ”Active display“ you find the type of Braille display you are using, the interface it is connected to and its serial number. In addition, you find the date when the next recommended maintenance of your Braille display is due.

In the field “Driver properties” the type of screen reader you are using is listed, as well as the version of your driver.

At “Your dealer” you get the contact details of your Help Tech dealer with postal address, telephone number and E-mail.

9 Active Tactile Control (ATC)

The Activator Pro's integrated ATC technology now makes it possible for the first time to detect the Braille dots that you touch. By evaluating the pressure on the individual tactile elements, your reading position on the Braille line can be determined. Using various assistive functions that can be customized, your reading position can be employed to control the screen reader. Depending on your current reading behaviour, certain actions can be initiated. ATC can recognize four different reading behaviours:

- Normal reading: The reading position is moving from left to right.
- Fast reading: Reading speed is faster than a pre-set rate of characters per second.
- Resting: A character is touched for longer than a specified time period.
- Reading backwards: The reading position is moving from right to left.

A certain action can be assigned to each of these four behaviours. There are two customizable modes for the so-called assistant functions. The two modes are "Reading" and "Learning". The tab "ATC" in the Settings menu of the Help Tech Braille system is used to specify what your Activator Pro and your screen reader should do when each reading behaviour is detected, depending on whether you have selected either Reading or Learning mode.

Under the ATC tab, the checkbox "Use ATC" allows you to enable or disable the ATC functionality. This can be done more quickly by pressing [SPCL + 1 7] or {Fn + space + f + a} when Braille input is deactivated. By default, this function is unchecked.

The sliding "Sensitivity" control is used to set the sensitivity of the ATC sensors to match your personal reading style. You can increase or decrease the sensitivity by activating the "right" or "left" cursor key respectively. Advanced Braille readers with a light touch while reading Braille could experience that the reading position is not detected reliably even with high sensitivity set. In this case, we recommend to lower the dot firmness to “**Soft**” (see chapter 8.5 Miscellaneous) to improve the detection.

The field "Assistant Mode" is used to specify whether you want to take advantage of the assistant functions for reading or learning Braille. If you have selected one of the two functions in the combo box, you can use the "Settings" button to determine how the screen reader should react to your reading behaviour. More details on these settings are provided below in Section 9.1, ATC Assistant for Reading or Learning.

The ATC-monitor enables the text currently being displayed on the Braille line to be shown in a window corresponding to the size of the Braille line, so that a seeing person can follow what is being read on the Braille display. The Settings button in this field allows you to specify the colour used for displaying the reading position. A different colour can be specified for each reading behaviour. More details on these settings are provided below in Section 9.4, ATC-Monitor Settings.

If the checkbox "Show monitor after start-up" is checked, the ATC-monitor will automatically start upon the screen reader's start-up. If you want to turn on the ATC-monitor later, you can go into this menu and activate the button "Start monitor now".

If you check the "Generate protocol" checkbox at "Reading protocol", everything you enter or read on the Braille display will be logged in a protocol file when you click "OK" or "Apply". It is faster to use the short key combination [SPCL + 1 2 3] (chord l) to activate the logging function. If ATC was off, it will be automatically activated. You are free to choose any name for this protocol file. The default file name is “HtAtc.log”. Generating the reading protocol

stops only when you deactivate this "Generate protocol" option again or when you quit the screen reader. The protocol file can be scanned and analysed by an evaluation program later.

9.1 ATC Assistant for Reading or Learning

You can specify how the screen reader is supposed to react to your reading behaviour. The following actions are available:

- no action
- speak letter: The letter at the current reading position will be spoken.
- speak word: When touching the first letter of a word, the word will be spoken. It is also possible to change the setting so that the word is spoken when read completely. Here you can also set a delay time.
- speak Braille display: The text shown on the Braille display will be spoken by the speech output.
- low tone signal
- high tone signal
- speak Braille display and move to the next line: When using this setting with "reading fast", you can skip through text line by line till you reach the section where you want to read without speech. After refreshing the Braille display, the reading of the previous line will be interrupted, and the reading starts with the new position.
- say all and route Braille line: Starts reading the whole text and the Braille display will be synchronized with the reading position of the speech output. When detecting any reading position, the speech will stop, and the Braille display shows the current position.
- say current character´s attributes: The attribute at the current reading position will be announced, e.g. "bold Arial 12".
- say character attribute changes: If the attribute at the reading position changes, like from normal to bold, then "bold" will be announced. Also, changes of font type and font size will be announced, e.g. "bold Arial 12".
- route mouse cursor to reading position: The mouse pointer will – depending on the reading behaviour – be moved with the reading position. This helps to synchronize the magnification area on the screen with the reading position on the Braille display.

The following four behaviours can be detected as your reading status:

- reading fast
- reading normal
- resting
- reading backwards

It is also possible to delay the speech output for a certain amount of time if you do not want the text to be spoken right away. This delay is entered in milliseconds. The possible range for this value is from 0 (no delay) to 5000 milliseconds.

You can also determine the reading speed above which the ATC-function will consider your reading speed as "fast". For this specification, you can enter any value from 0 to 200 characters per second.

The time period after which the ATC-function will identify your reading status as "resting" can also be customized. This value is specified in milliseconds.

You can further control the speech output by checking or unchecking the checkboxes "Speak word only at end of word" and "Also spell word". If "Also spell word" is checked, you can insert a delay before speech output starts spelling by activating the checkbox "Use delay while spelling word". These settings are available only if you have assigned the action "Speak word" to any one of the four possible reading behaviours.

You can control what happens when you reach the end of the Braille line in the field "Action when line has been read". Three checkboxes are available. If you check "Signal tone", a signal tone will be emitted when you have read the last character on the line. If the checkbox "Automatic scrolling after x milliseconds" is checked, you do not need to press [N6] to advance when you reach the end of the line, instead the next line will automatically be displayed after the specified time has elapsed. If you activate the checkbox "Indicate empty lines", blank lines will be shown on the Braille display by setting all the dots of the first three elements on the display. This is useful if you have automatic scrolling enabled, because now you do not have to manually advance through blank lines by pressing [N6].

9.2 Tips for Utilizing ATC to Learn Braille

In this section, we provide some useful tips on how to improve your Braille reading skills with the help of ATC. Start ATC by pressing [SPCL + 1 7] or {Fn + space + f + a} when Braille input is deactivated. This will activate the Braille system's reading position detection via ATC. You can turn ATC off again by entering the same key combination.

By default, the Assistant Mode is "Reading". Under the tab ATC in the Settings window for Help Tech Braille displays, change the Assistant Mode to "Learning". Now, after you have read an entire word, the word will be spoken. In this way, ATC can help you to become more secure in reading text. If you come across any Braille character that you do not recognize, you only need to remain at that character and the speech output will name the character. Individual letters and characters are also spoken if you are reading backwards.

ATC can also be extremely useful when you are learning a foreign language. For example, if you want to learn how to pronounce, German words correctly, you can first switch your speech output to German. Then set the Assistant Mode under the tab ATC in the Settings window for Help Tech Braille displays to "Learning". We recommend setting a speech output delay of approximately 2000 milliseconds, i.e. 2 seconds. Now when you activate ATC, you will have two seconds after having read an entire word to pronounce it yourself, before the speech output speaks the word as well.

9.3 Tips for Utilizing ATC for the Experienced Braille Reader

In this section, you will find tips on how the ATC technology can help you as an experienced Braille display user, to operate your PC and your screen reader program even more efficiently.

Probably the most important Assistant function made possible by ATC is automatic text scrolling when you reach the end of the Braille line. Start ATC by pressing [SPCL + 1 7] or {Fn + space + f + a} when Braille input is deactivated. This will activate reading position detection via ATC. In the default settings, the Assistant Mode is "Reading". You can turn ATC off again by entering the same key combination.

Automatic scrolling is the default setting. The active cursor should be tracking the Braille display in order to make automatic scrolling of the text possible. If ATC is active, you will find that the Braille display automatically sets the position on the next segment of text once you

have read to the last character represented on the Braille line, just as if you had entered [SPCR] or [N6].

If you do not change the default settings in Reading mode, you can also cause the entire text on the line to be spoken when ATC recognizes fast reading. Simply move quickly across at least three Braille characters from left to right, which will be detected as fast reading and the speech output will speak the entire text on the display. By default, fast reading is recognized at a reading speed of greater than 15 characters per second. You can customize this value in the Reading Speed profile.

At this point, we would like to draw your attention to a special feature: If there is a blank line, the first three elements on the display will be set with all eight dots. This enables the Braille system to provide automatic scrolling even when there are blank lines.

If you remain at one character for longer than one second or whichever delay you specify in the Reading Speed profile, that character will be spoken.

We recommend the following ATC-settings for you as an experienced Braille reader:

With "reading normal" we recommend using "say character attribute changes". Now you can easily follow attribute changes at the reading position without a hassle switching to attribute information. This is especially useful when checking the layout for example within a word document.

With "reading fast" it makes sense to use the action "say all and route Braille line". This allows you to browse fast through a text till you reached the position you were looking for.

You can assign the reading behavior "resting" with "say current character´s attributes". This allows you to check the current character´s attributes anytime.

For "reading backwards" we recommend assigning the action "route mouse cursor to reading position". This allows you with a small gesture to drag the mouse pointer to your reading position. This can be helpful to guide the attention of a sighted person to a specific text position.

9.4 ATC-Monitor Settings

For the graphic display of the reading modes on the monitor screen, you may assign a different colour to each reading status. The following colours are the default assignments for each mode:

- Finger on line: yellow
- Reading status fast: light blue
- Reading status normal speed: green
- Reading status resting: orange
- Reading status reading backwards: red

You can customize the colours by opening the standard Windows colour dialog.

10 Important Information

Before you start installing or operating the device, please read the operating instructions and safety instructions, which are provided in a separate document (on the StartStick and in paper form). These contain important information on safe handling and proper commissioning of the device. Failure to observe these instructions can lead to malfunctions or damage.

10.1 Technical Support

Your Activator Pro is a highly complex product. Although the Activator Pro has been optimized to be as easy to use and as self-explanatory as possible, errors in understanding or operation may occur, which may impede your use of the device.

We recommend that you consult this manual first if you encounter difficulties. All procedures as well as error messages are described here. If this does not solve your problem, you have the option of reviewing possible solutions in the download area on Help Tech's web page, located at www.helptech.de.

As an alternative, you can also contact your dealer or local customer service representative. These agents receive ongoing training and information about the product, beyond what can be included in any manual.

If this does not result in the desired solution of your problem, do not hesitate to contact Help Tech GmbH & Co. KG in Horb directly. You have the following options:

Mail: Help Tech GmbH & Co. KG, Brunnenstr. 10, D-72160 Horb a. N., Germany
Phone: +49 7451 5546 55
Fax: +49 7451 5546 67
E-Mail: help@helptech.de

11 List of Key Combinations

Below you will find a list of the most important functions and their key combinations. The numbers in the right-hand column of the tables refer to the Braille dots to be pressed. Braille input must be activated via the “Braille” key on the keyboard.

11.1 Navigating in the internal Menu

Function	Keys
One menu item to the left	N1/N4 or SPC+7 or SPC+1
One menu item to the right	N3/N6 or SPC+8 or SPC+4
First menu item within this level	SPC+1 2 3
Last menu item within this level	SPC+4 5 6
Move up one menu level	N2
Select or move down one menu level	N5
Toggle checkbox	SPC or N5 or CR keys
Select menu item directly	Hotkeys
Return to suspended Editor	SPC+1 2 3 4 5 6

11.2 Keys while controlling connected devices

Function	Keys
Return to menu	Left special key with ActiveSplit turned off until "Menu Mode" is displayed
Switch between Braille display and status cell display	SPCL+SPCR
ATC forwarding with all screen readers	Chord 1 7 8 when Braille Input Mode is active

11.3 Key commands in the editor

Function	Braille keys	Computer keyboard
Canceling operations, deselecting	N2	Esc
Read in the text	N1/N4 or N3/N6	Arrow keys
Start automatic reading	SPC + N3/N6	---
Changing the automatic reading speed	N1/N4 or N3/N6, if automatic reading is active	---
Scroll manually	SPC	Space bar
Stop automatic reading	CR keys	---
Automatic advance with ATC on/off	Chord A (SPC + 1 7)	---
Delete the character at the cursor	SPC + 4 5	Delete
Backspace key	Chord b (SPC + 1 2)	Backspace
Cursor to the beginning of the file (Home)	SPC + 1 2 3	Ctrl+Home
Cursor to the end of the file (End)	SPC + 4 5 6	Ctrl+End
Cursor to the beginning of the line	SPC + 1 3	Home
Cursor to the end of the line	SPC + 4 6	End

Function	Braille keys	Computer keyboard
Cursor to the beginning of the next sentence	SPC + 5	Ctrl+Arrow down
Cursor to the beginning of the previous record	SPC + 2	Ctrl+Arrow up
Cursor to the next word	SPC + 6	Ctrl+Arrow right
Cursor to the previous word	SPC + 3	Ctrl+Arrow left
Move cursor to the left	SPC + 7	Arrow left
Move cursor to the right	SPC + 8	Arrow right
Cursor one line up	SPC + 1	Arrow up
Cursor one line down	SPC + 4	Arrow down
Place cursor directly	Cursor routing keys	
Mark the beginning of the block	SPC + N5 or press the routing key twice at the start of the block	Ctrl+Enter
Cut out block	Chord x (SPC + 1 3 4 6)	Ctrl+x
Copy block	Chord c (SPC + 1 4)	Ctrl+c
Delete block (without copying)	Chord X (SPC + 1 3 4 6 7) or SPC + 1 2	Ctrl+X
Insert block	Chord v (SPC + 1 2 3 6)	Ctrl+v
Change mark and cursor	SPC + 7 8	---
Insert/overwrite mode	Chord i (SPC + 2 4), default setting is Insert	Insert
Set mark	N1/N4 + N3/N6	Ctrl+Shift+m
Jump to mark	Chord m (SPC + 1 3 4)	Ctrl+m
Search forward	Chord f (SPC + 1 2 4)	Ctrl+f
Searching backwards	Chord F (SPC + 1 2 4 7)	Ctrl+Shift+f
Replace forward	Chord r (SPC + 1 2 3 5)	Ctrl+r
Display characters in ASCII	Chord D (SPC + 1 4 5 7)	Ctrl+Shift+d
Insert current date	Chord d (SPC + 1 4 5)	---
Save file (without closing)	Chord s (SPC + 2 3 4)	Ctrl+s
Open file from the editor	Chord o (SPC + 1 3 5)	Ctrl+o
Open file in read-only mode	Chord O (SPC + 1 3 5 7)	---
Switch to the next file	SPC + 5 6 8	Alt+Tab
Go to previous file	SPC + 2 3 7	Alt+Shift+Tab
Save and close file	Chord e (SPC + 1 5)	Ctrl+e
Suspend editor	SPC + 1 2 3 4 5 6	Ctrl+Spacebar
Settings menu of the editor	Chord u (SPC + 1 3 6)	Ctrl+u
Status display	Chord S (SPC + 2 3 4 7)	Ctrl+Shift+s
Help function	Chord h (SPC + 1 2 5)	Ctrl+h
DirectTransfer - Transfer of the selected text block. If not marked, then transfer the entire text	Chord E (SPC + 1 5 7)	---

12 Error Messages

This section contains the error messages that can be displayed on the Activator Pro. Some messages are always in English because they are not part of the message files. They come directly from the firmware because they must be always available.

12.1 Error Messages English only

These messages contain abbreviations which indicate the error status. Their meanings are:

- FER (Fatal Error): A serious error has occurred.
- ERR (Error): An error has occurred.
- WRN (Warning): The system is notifying you about something that may require your attention.

If one of the error messages listed below is displayed, please reinstall the firmware into the device via the included StartStick (see chapter 2.2.1 StartStick).

- "FER: Message file not found. "
- "FER: Could not read MSG security header."
- "FER: Invalid MsgId. "
- "FER: Invalid header ID in MSG file."
- "FER: Invalid size of message file header. "
- "FER: Invalid maximum length of messages."
- "FER: Expected MSG version x, found y."
- "ERR reading KBD security structure."
- "ERR: Invalid ID in KBD header."
- "ERR: Invalid size of KBD header."
- "ERR: Expected KBD version x, found y."
- "ERR: Invalid KBD table format."
- "ERR reading KBD table."
- "WRN: KBD layout not found. Using standard layout."

12.2 Error Messages from the Message File

The messages listed below come from the message file to be downloaded. Messages of a general nature, system and editor messages can be found here.

12.2.1 General Messages

"Please wait!!!"
Cause: This message appears while the system is executing a task requiring some time. For example, this would be the case while the system is generating the file list.

"Cannot execute this function"
Cause: A function cannot be executed.

"Deactivating function keys!"
Cause: A reminder that function keys have been deactivated. After turning the unit off and back on, the function keys will again be active.

12.2.2 File System Messages

"No files stored on disk!"
Cause: There are no files stored on the storage media.

"Error creating braille character set file"
Cause: There is not enough memory in the file system to generate the Braille character sets.

"New braille set file created! Please reload needed sets!"
Cause: The Braille character set file was recreated, because it was either missing or its size was incorrect. You will have to reload the required character sets into the Activator Pro.

"Braille set n is empty"
Cause: You are attempting to activate a Braille character set numbered x, but that character set slot is empty.

"Error writing configuration file"
Cause: An error occurred while saving the configuration.

"Saving configuration, please wait!"
Cause: This message is displayed while the configuration file is being written.

"New configuration file created. Please check your settings!"
Cause: The configuration file was recreated, because it was either missing or its data were incorrect. The settings have now reverted to factory defaults. You should therefore check the settings and customize them as you wish.

"Fatal: Invalid MSGID! Please upload appropriate msg file!"
Cause: A message was requested that is not present in the currently loaded message file. Loading the message file matching the current firmware for the selected language will resolve the problem.

"File in use by editor. Please close it first"
Cause: You are attempting to delete or transfer a file which is currently open in the Editor.
Result: The file cannot be deleted.
Remedy: Return to the Editor, then close the file and try again.

"Warning: Deleting this file can cause system instability"
Cause: You are attempting to delete a system file.
Result: The possible results depend on which file you are attempting to delete. For example, if you delete the file containing the Braille character sets, that file will be regenerated once the Activator Pro has been turned off and back on again and you must then download the needed character sets again. However, if you delete the message file for the selected language, the Activator Pro can no longer operate until you have reloaded it.
It is therefore recommended that you delete system files only when you are completely clear on what the results will be.
You take on a great deal of responsibility by being given the option of deleting system files. Help Tech GmbH & Co. KG therefore accepts no warranty claims arising from any damage caused by deleting system files.

"System files can not be deleted while the editor is active"
Cause: You are attempting to delete a system file while the Editor is in its suspended state. However, this is not possible because the Editor accesses system files.
Result: See above.

Remedy: First, close the Editor, then delete the system file. Please note that deleting any system file can have serious consequences. Your Activator Pro may be inoperable until the system file has been reloaded again.

12.2.3 Editor Messages

"Error writing file"
Cause: An error occurred while saving the file.

"Help not available":
Cause: You have activated the Help function. The Editor is searching for the "Language_ HELP.HSF" file for the selected language, but the file cannot be opened.
Remedy: Download the Language_HELP.HSF files to the Activator Pro.

"Bookmark x does not exist"
Cause: While jumping to a bookmark, you specified a mark that does not exist. X is the name you entered.
Remedy: Try to enter the name of the mark again or navigate through the list of available marks using the cursor-up and cursor-down commands.

"No bookmarks set"
Cause: You are attempting to jump to a mark, but no marks have been set for this file.

"Search failed, wrap around (Y/N)?"
Cause: While searching for a text string, the Editor has reached either the beginning or the end of the file (depending on the direction of the search) without having found the search term. If you respond by entering [**y**], the entire file will be searched for the same string again. If you respond to this prompt by entering [**n**], the search will be aborted, and you can continue editing the text.

"No space to open another file"
Cause: You have already opened five files and are attempting to open another one. However, the Editor can administer a maximum of five open files.
Remedy: Close any files not currently needed and then open the desired file.

"Variable x unknown"
Cause: You have entered an invalid argument for one of the variables in the Editor's Setup menu. X is the variable you entered.
Remedy: Re-enter the variable or select one of the variables from the list by using the cursor's up and down functions.

"x: valid range [m, n]"
Cause: The numerical value of a variable you entered is outside of the valid range. Here, x is the name of the variable, m the minimum value and n the maximum permissible value.
Remedy: Enter a value within the specified permissible range.

"Out of disk space"
Cause: While you are working within the Editor, the Activator Pro determines whether the available memory is sufficient to save all of the open files. If this is not the case, this message is issued.
Remedy: Try to save and close smaller files first, then close larger files.

"Out of page memory"
Cause: You are attempting to open a file, but there is not enough memory available to divide the file into pages or to administer the pages.
Remedy: Close any files not currently needed.

"Disk almost full"

Cause: While you are working within the Editor, the Activator Pro determines whether the available memory is sufficient to save all of the open files. This message appears as a warning before it is too late.

Remedy: To ensure that you will be able to save all modified files, you should save or close any files you no longer need open right away. Save any smaller files first, which will free up some space, then larger files.

"Page memory almost full"

Cause: While you are working within the Editor, the Activator Pro constantly checks how many pages can still be administered. The Editor can manage a total of 3072 pages. If only 10 more pages can be created, you will be notified with this message.

Remedy: Close any files not currently needed to make room for more pages.

"Switching to read only mode"

Cause: You are attempting to open a file. The Editor determines that with the amount of memory left, the file can be opened, but not edited.

Remedy: Close and save any files not currently needed.

"File x not found"

Cause: You are attempting to open a file in the Editor in read-only mode, but the file was not found. X is the file name you entered.

Remedy: Try to re-enter the file name. It is important to note that the file name must be entered with exactly the same spelling under which it is stored on the Activator Pro. If the result is again negative, you can suspend the Editor and open the file from the file list.

"Writing x aborted"

Cause: While saving a file, you have pressed the [N2] key. The saving process has therefore been cancelled.

"Not enough space on disk"

Cause: You are attempting to cut, copy or save a text block to a new file. While writing the block, the Editor determines that there is not enough memory available for this operation.

"x in use, please close it first"

Cause: You have opened file x within the Editor and are currently working on a different file. You are attempting to write to file x or to read data from file x. For example, you might have opened the clipboard within the Editor in order to make changes in it before pasting its contents to a file. If you try to cut or copy any other text block at this point, without first closing the clipboard, the Editor cannot execute that function and will instead notify you with this message.

"Cannot open file x"

Cause: You are attempting to open the Editor's swap file. This is not possible, because this file contains the portions of text that have been edited and it is only accessible to the Editor itself. X is the name of the swap file.

"Copy to x failed"
"Cut to x failed"
"Paste from x failed"

Cause: You are attempting to execute block operations, but the file system cannot provide the memory needed. X is the clipboard's file name.

"No space to open another file"

Cause: You tried to open a new file. The Editor is not able to do this. The Editor can open only 5 files at one time.
Remedy: Close files, you do not need now.

"End of text"

Cause: You are at the end of a file and are attempting to call up ASCII representation.

"Recreating editor configuration file"

Cause: The Editor has determined that the existing configuration file is incompatible. A new Editor version may require a different file format for the configuration file. Should the Editor continue to use the existing configuration files for reading any file configurations, this could lead to complications. The configuration file contains the version number for this reason. If it does not match the Editor's internal version number, the configuration file is deleted and then regenerated. Although this causes the loss of all configuration settings saved for a file, such as marks, it is necessary because of safety concerns.

13 Copyright Notice

All rights reserved, copyright Help Tech GmbH & Co. KG. No portion of this manual may be reproduced in any form without prior written permission from Help Tech GmbH & Co. KG.

Handy Tech is a trademark of Help Tech GmbH & Co. KG.

Windows is a registered trademark of Microsoft, Inc.