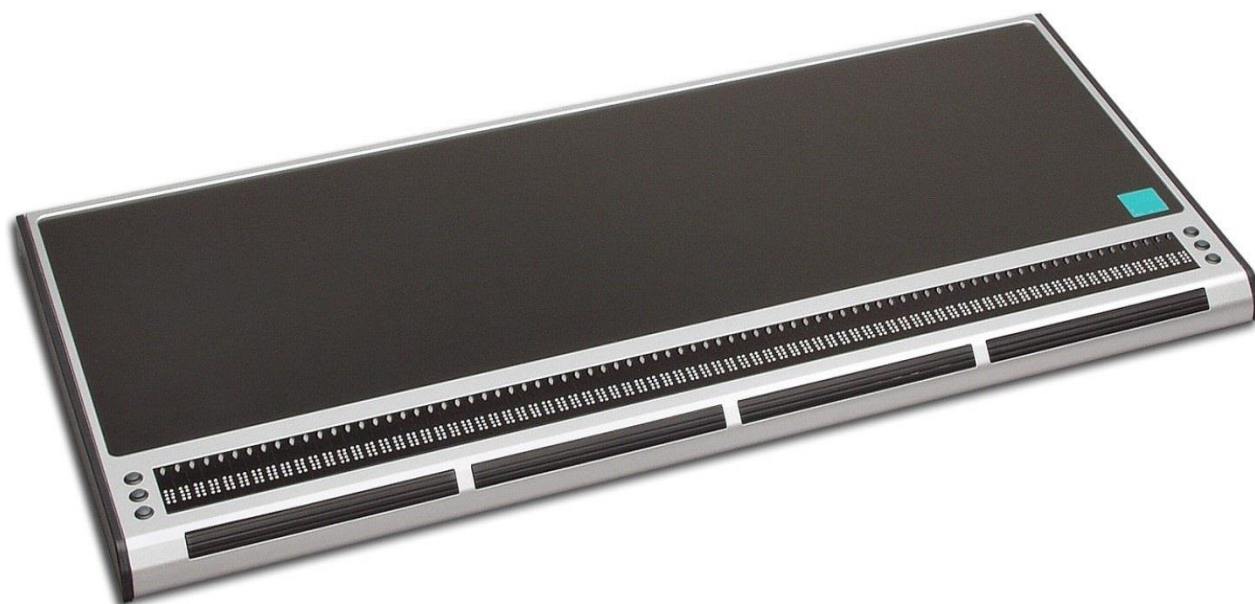to see with different eyes.

products for the visually impaired - Development - Production - Sales

Visio Braille

VarioPro2 80

User Guide

User guide version: 1.0

English 06/2023

VisioBraille - see with different eyes

We continue the products of BAUM Retec AG!

The company VisioBraille is convinced of the CCTV readers from the VISIO family, the VARIO Braille displays and Poet text-to-speech readers!

Encouraged by the overwhelming positive reactions of customers and distributors, VisioBraille decided to continue to produce the products of the former company BAUM Retec AG and ensure the service.

On this basis, our customers will provided with newly developed devices in the future.

With these innovative tools, we want to balance the limitations of blind and visually impaired people in the best possible way, strengthen your independence and provide assistance on the way to an independent everyday life.

We reach this aim through our strong commitment developing quality products, through years of experience in this field, through our excellent Know-how and proven expertise, using state-of-the-art technologies that significantly improve the quality of life of our customers.
Ergonomics, design and quality of the products developed and produced in Germany fulfill the highest demands.

In the private sector, as well as in education and work, you can break down barriers using our high-quality products, and continue to drive your success.

Contents

1　About this user guide

This manual addresses to end users of VarioPro2. The device was shipped to you as a completely assembled and tested device. In this manual you will find all information required to use your VarioPro2.

The manual is a part of your device. Please read this manual with care and attention as it contains important instructions and tips with regard to operating the device and its safety. Please keep the manual always within reach of your device and do pass it on to a next owner.

Chapter 6 contains a description of the device, and
Chapter 7 contains general information and the System Menu settings.

Chapter 8 describes the installation process and gives details on how to connect VarioPro2 to communication port.

Chapter 9 describes the Braille key functions under various screen readers.

At the end of the manual you will find details of our branches and our Hotline number which you are welcome to ring with questions and suggestions.

We suggest that you store this user guide in a safe place for future reference.

We hope you enjoy working with your new Braille display.

2   About VarioPro2 80

Congratulations on buying your new VarioPro2. You have just acquired a new Braille display which offers a new dimension in functionality, flexibility and adaptability.

VarioPro2 is a Braille display with 80 Braille cells designed primarily for workstation usage.

The display has universal and simple USB-connection.
It includes also an USB-hub with 3 ports (for keyboard, mouse or USB-stick)

The highly robust casing is made from light metal with an integrated non-slip plastics upper surface for installation of the keyboard. Such techniques are found in modern camera bodies and are already used in Pronto. They allow us to construct very elegant, stable and robust equipment.

The VarioPro2 Braille displays allow additional modules to be attached – a new milestone in the development of useful equipment for blind PC users. Their outstanding feature is the combination of the most up-to-date technology with a tried-and-tested simple design.

3 Purpose

According to EU regulation 2017/745 (MDR), this product is a class I medical device.

This medical product is used to compensate for the disability of severely visually impaired or blind people.

For this medical product, the Medical Product Law Implementation Act (MPDG) applies from May 26th, 2021.

The Medical Devices Operator Ordinance (MPBetreibV) must be observed.

This product may only be used in residential and commercial areas.

In medical facilities, this product may only be used in office space.

The expected lifetime of the medical device is 7 years.

In order to achieve the expected service life of the product, a complete professional cleaning by VisioBraille GmbH's technical service is recommended at intervals of maximum 2 years. This service is chargeable.

4 Safety instructions

This user manual must be read carefully before using the medical device.
The medical device may only be put into operation by the operator if
- this medical device has been subjected to a functional test by VisioBraille GmbH or an authorized person at the operating site, and
- the user has been instructed by VisioBraille GmbH or an authorized person using the instructions for use and safety-related information.

The product may only be commissioned by instructed persons.
Evidence of the instruction is to be provided by the operator.

The device may only be put into operation if there is no visible damage to the device or the supply lines and no malfunctions are to be expected.
The medical device may only be used with the intended original parts and the combination products intended by VisioBraille. If a combination with products from other manufacturers is required, these must comply with the applicable legal provisions.

WARNING

Only operate this device in a dry environment. The device must never get wet, otherwise there is a health risk from electric shocks.
- Do not open the device (high voltage).
- Do not insert objects into the braille module channels.
- Never clean the Braille modules yourself.

CAUTION

- Never expose the device to direct sunlight or moisture (rain).
- Keep the device away from heat sources such as electric heaters.
- Protect the device from dust.
- The ambient temperature should be between -10C and +50C and the humidity should be between 30% and 80%.
- Avoid locations subject to rapid or extreme changes in temperature or humidity.
- Do not use the device near liquids or corrosive chemicals.

- Do not place heavy objects on the device. Do not subject the device to strong pressure or drop objects on the device. This could damage the device or stop it from working properly.
- Do not place the device near objects that generate strong magnetic or electromagnetic fields (e.g. loudspeakers of a stereo system).

General Precautions

The design of our products ensures optimum safety and reduces the health burden of overexertion. Nevertheless, by observing a few precautionary measures, you can help to avoid health problems or damage to the product.
Place the device in a position that ensures comfortable posture and safety.
Place the device on a level surface and at a comfortable height and distance.
Set up the device so that it is directly in front of you when working and make sure that there is enough space to operate the peripheral devices.
Longer breaks and relaxation exercises are recommended to avoid straining your hands and wrists from prolonged use of the controls and reading the Braille display. In specialist shops you will find literature on the ergonomic setup of a workplace and on posture, which can be used to reduce overexertion.
If a mobile phone is used, a minimum distance of 30 cm must be maintained between the medical device and the mobile phone.

Cleaning

Avoid getting dirt on your hands and fingers.
The surface of the Braille display - but not the Braille modules - can be cleaned with a soft, slightly damp cloth.
Never use harsh cleaners or soap.

Packaging and Transport

To avoid damage, remove all lines from the product before transporting it. The device bag should be used to transport mobile devices.
The original packaging must be used to send the product.

5 Before you start

Please check contents of package before you use the device. If parts are damaged or missing, please do not hesitate to inform your dealer.

5.1   What's in the box

- 1 VarioPro2 Braille display
- 1 USB-C cable
- 1 users guide

Please keep the shipping box, so you can safely pack the device in case you have to ship it for service etc. Improper packaging can cause loss of warranty. In case you need a new shipping box, we can send you one.

Carefully read manual and safety instructions before you use VarioPro2.

6   Description of the device

6.1   Keys and operators
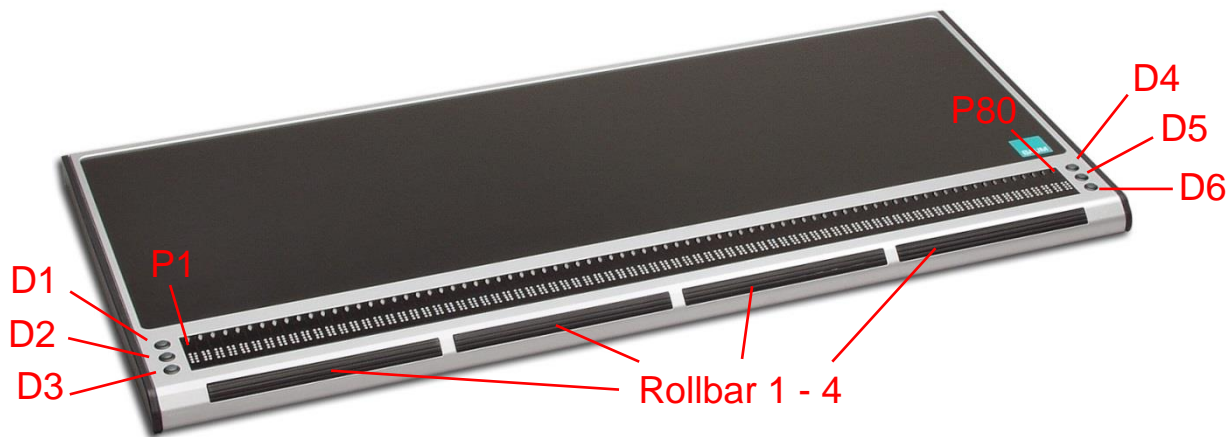
VarioPro2 does not require its own on/off switch and is powered from the PC. As soon as VarioPro2 receives power it switches itself on and emits a corresponding tone.

On the front are the 80 Braille cells of VarioPro2 80. Above each cell is a cursor routing- or positioning-key P1 – P80).

On both the left and right of the Braille cells are three small round keys, known as Display keys. On the left they are numbered D1 to D3 from top to bottom, and on the right D4 to D6 from top to bottom (cf the numbering of the Braille dots) and can be pressed individually or in combinations.

On the front edge there are wide cylindrical 'Rollbars'. They are easy to use with the thumb and allow upward and downward movement with perceptible and quiet switching movements.

The functions of the operators vary according to the screen reader used (JAWS, NVDA or other screen readers).

The USB-C connection socket (for connecting to a computer, laptop or notebook) is about 2 cm embedded in a recess on the left rear of the housing.

There are 2 USB ports for additional devices on the left side of the housing, and another on the right side.

The plastic surface on the top is ideal for placing the PC keyboard.

6.2   Power supply

The device is powered via the USB cable.

6.3   USB-Hub

The new VarioPro2 includes an additional USB hub.
There are two USB ports on the left side of the case and another on the right.
The VarioPro2 is powered by the PC. Therefore, only simple devices such as a keyboard, mouse or USB stick can be connected.
From connecting or using more power-intensive devices such as Hard drives or fans are strongly discouraged, otherwise the functionality of the VarioPro2 can no longer be guaranteed.

7   The VarioPro2 System Menu

As soon as VarioPro2 receives power (after connecting it to a PC with the USB cable), the first line of the System Menu appears on the Braille cells. This menu contains information relating to the Braille display. If necessary, the settings can be changed on the advanced System Menu.

Usually you will pay no attention to the System Menu, as it disappears as soon as data are transferred from the PC to the Braille display or your screen reader reads out some text, so that you can work with the Braille display.

The basic System Menu consists of three lines giving the name of the device, its serial number, the communication channel/port being used, and the protocol/emulation used.

It will often prove necessary to install special settings or values, which must be done on the advanced System Menu which can be accessed directly with its own key combination.

The lines in the System Menu can be accessed upwards with D1 (top left), and downwards with D3 (bottom left). Whenever the System Menu is called up the first line will be displayed.

Items can be selected in the advanced System Menu by pressing one of the cursor routing/position buttons above the displayed option. The active or selected item is indicated with Braille dots 7 and 8.

The lines of the System Menu will be described below.

To quit the advanced menu, browse through to the "Menu off" option and press a cursor routing/position key over the word "off"; this is done automatically as soon as data has been exchanged between the PC and the Braille display.

All settings are automatically saved when quitting the System Menu and remain active until next amended.

NB:
How do you open the System Menu when VarioPro2 is connected to the computer? Interrupt the power by pulling out the USB cable and plugging it back in.
The connection between VarioPro2 and the computer application will thus be lost and the System Menu will appear. Then simply move the cursor to quit the System Menu and return to the previous application.

If the System Menu keeps disappearing because the screen reader is constantly exchanging data, either close the screen reader down or interrupt the USB connection and connect an USB charger.
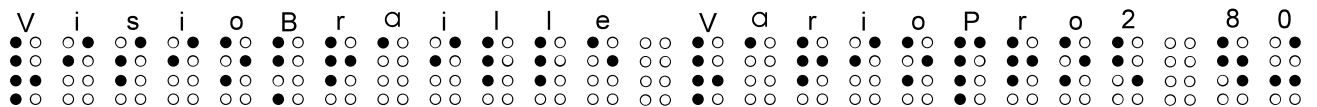
7.1 The basic System Menu

7.1.1 First line: Name of the Braille display

This is the first entry in the System Menu. It displays the name of the Braille display.

VisioBraille VarioPro2 80
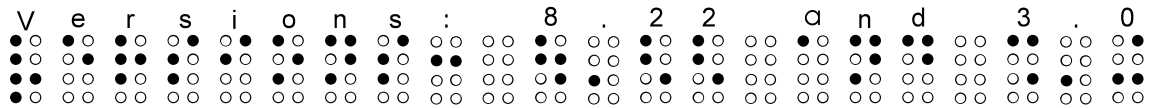
7.1.2   Second line: Version information

Firmware and hardware version used are displayed here.

Version: a.b and c.d

```
V  e  r  s  i  o  n  s  :     8  .  2  2     a  n  d     3  .  0
```

a.b = Firmware-Version (e.g., 8.22)
c.d = Hardware-Version (e.g., 3.0)
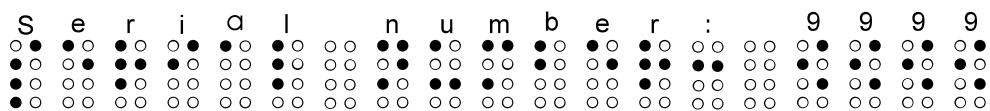
7.1.3   Third line: Serial number

This shows the serial number of the Braille display

Serial number: xxxx

```
S  e  r  i  a  l     n  u  m  b  e  r  :     9  9  9  9
```

7.2   The advanced System Menu

The additional options here allow you to optimise the set-up of your Braille display. You can select the communication channel/port and protocol (emulation), change the values of the auto-power-off and volume, or restore the factory settings.

All settings are saved as soon as you quit the System Menu.
All current and selected settings are indicated by Braille dots 7 and 8 underneath the relevant value.
To select, simply press one of the cursor routing/position keys above the relevant value.

Open the advanced System Menu by first pressing and holding both outer cursor routing/position keys, and then both upper display keys (P1, P80, D1, D4). Keep holding all four keys for at least 5 seconds or until the device beeps.

The menu will open at the last entry "Menu off"; use D1 and D3 to browse through the menu options.

7.2.1   Fourth line: Protocol / Emulation

The protocol (emulation) can be set here. The following protocols are available:

VisioBraille
handytech
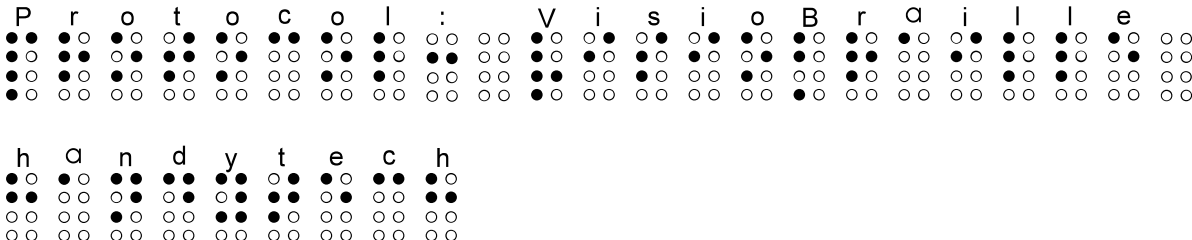
7.2.2   Fifth line: Auto-power-off

Set the duration after which the Braille display will shut down automatically, when no more data are transferred and no keys pressed. The options are: 5 minutes, 15 minutes, 1 hour, 2 hours, never. Press the cursor routing/position key above the desired setting (15 minutes is the standard).

Auto-power: 5min 15min 1h 2h never

7.2.3   Sixth line: Tone

The tones can be switched on and off. A sample tone will be emitted after changes to the volume are made.

Sound: on off

7.2.4   Seventh line: Rollbars

Here you can switch off the Rollbar function.

Rollbars on off only-keys

7.2.5   Eighth line: Factory settings

This option allows the Braille display settings to be restored to their status at the time of delivery. Click on one of the cursor routing/position keys above the word **restore**.

Restore Factory settings

```
R  e  s  t  o  r  e     f  a  c  t  o  r  y     s  e  t  t  i  n  g  s
```

The factory settings are as follows:

- Protocol: VisioBraille
- Auto-power-off: never
- Tone: on
- Rollbars: on

7.2.6   Ninth line: Quit menu

Press one of the position keys above the word "off". When quitting the menu all changes will be saved automatically, and the Braille display will resume its normal user status.

Menu off

```
M  e  n  u     o  f  f
```

All settings will now be saved automatically.

7.3   Self-test

The Self-test function can only be accessed from the advanced System Menu.

In the System Menu, press the first two and the last two cursor routing/position keys on the Braille display together to launch Self-test. The dots of each Braille cell will be activated one after the other and then cleared; the pressed keys will also be displayed. As soon as data have been transferred from the PC to the Braille display the Self-test will end and the display will return to normal.

Once Self-test has been launched, dot B1 then B2, B3, B7, B4, B5, etc. will be set on each cell until all 8 dots are set. They will then be cleared one by one until all are cleared. This process is then repeated.

Press and hold the keys as follows:

D1 to set dots B2B5 in the first cell
D2 to set dots B3B6 in the first cell
D3 to set dots B7B8 in the first cell
D4 to set dots B2B5 in the last cell
D5 to set dots B3B6 in the last cell
D6 to set dots B7B8 in the last cell

Turning a roll bar moves a pattern of B2B3B5B6 to the left or right depending on the direction.
Pressing a roll bar produces a dash with B7B8 above this roll bar.
Pressing a cursor routing/position key sets B1B4 in the Braille cell underneath.

7.4   Switch on/off

The braille display turns on by connecting the USB cable to the PC and turns off when disconnected.
Switching on and off is signalled by corresponding audio signals. There is no dedicated on/off switch.

If there is no longer any communication with the PC and no button on the Braille display has been pressed, the device switches off automatically after the set "auto-power-off" time has elapsed.
The elapsed time is reset to zero after each keystroke and after each data transfer from the PC.

7.5   Firmware updates

So that you can prepare yourself for the future and always acquire the latest VarioPro2 developments, it is now possible to update the Braille display's software. All you have to do is to connect the Braille display to the PC and then run the update program which will automatically bring the display up-to-date. This program is so designed that the Braille display can still be used and a new update attempted should an update fail.

The update can be launched with both USB and serial connections.

During a software update the Braille display beeps every second and a status bar appears on the Braille cells.

8   Installation and connection

Please note that drivers and screen readers are constantly updated. Find the latest drivers at www.VisioBraille.de or directly at the screen reader website. There you will also find the latest instructions and user guides.

8.1   Device connection via USB interface

Today's PCs or notebooks have USB ports. The advantage of USB is the "Plug and Play" capability and the high speed. USB devices can be plugged in and unplugged while the devices are switched on without fear of damage. However, it can happen that a running screen reader has to be restarted in order to be able to control the Braille display again.

If you connect the Braille display to the PC, the new hardware will be recognized immediately and the PC will ask for a driver. Now insert the driver CD and let the PC search for the new driver on the CD. This will then be installed automatically, follow the instructions if necessary.
The dialog for driver installation can then appear again. Let the PC search for the required driver on the CD again and install it automatically.
A notice:
The installation of the driver is absolutely necessary so that the VarioPro2 can be addressed by the PC via the USB interface.

The current driver can also be downloaded from the www.visiobraille.de.

If the VarioPro2 was connected via the USB interface and the driver was installed from the enclosed installation CD, then the Braille display is addressed just as if it were connected to a serial interface. To do this, the driver simulates a so-called virtual serial interface. This has the advantage that Vari-oPro2 can also be used with screen readers that only support serial Braille displays. The driver also allows the Braille display to be addressed directly, as is the case with COBRA, for example.

By installing this driver, a USB interface of the computer will be addressed like a serial interface, e.g. as com3. To determine which virtual COM port was created, select the entry "Settings / Control Panel" in the start menu on the PC, go to "System", switch to the "Hardware" tab

in the dialog and go to the "Device Manager" button. Here you can view the assigned interfaces in a list.

Connect the rectangular plug of the USB cable to the USB port of the computer.
The other end of the cable has a small square connector that fits into the USB port of the VarioPro2. This is the middle square socket in the recess on the right rear side of the case.

When connecting the Braille display via USB and serial at the same time, with the interface setting "auto", the Braille display is only supplied with power via USB, data is transferred via the serial interface.

8.2   VarioPro2 und NVDA

To operate the VarioPro2 on the NVDA screen reader, you need an additional addon. You can download this from the website www.visiobraille.de in the Downloads, Drivers, NVDA Extension section.

- Start NVDA
- Download the "VisioBrailleVarioPro.nvda-addon" file and run it. NVDA should now begin installing the extension.
- From the NVDA context menu, open Settings.
- In Braille section, under Braille display, click change...
- Select "VisioBraille VarioPro braille displays" and finish the settings with OK

NVDA should now display texts on the VarioPro2.

8.3   VarioPro2 and JAWS

The latest JAWS driver is available for download from our web site.

You can also visit the *JAWS Screen Reader* page

If you don't install the driver, you will not find VarioPro listed among supported braille displays.

To use VarioPro2 with JAWS using a USB connection:

1. Install the VarioPro driver for JAWS.
2. Open the JAWS menu and go to menu Options > Braille. A dialog window appears labeled Braille Basic Settings.
3. Enter ALT+B to select Add Braille Display. You can also tab through the buttons to find and select it.
4. A new Select Components dialog window appears. Scroll down the long list of supported braille displays to find VarioPro 80. Press space to check the box for whichever display option you choose, and then press enter to move to the next window.
5. Make sure the output port is set to USB. If you specified more than one braille display you may be prompted with the same question for each display.
6. Next, select your primary device. For our example, we will pick VarioPro 80.
   Then select the Finish button.

Restart JAWS if prompted to do so. VarioPro should start working immediately.

8.4   COBRA and VarioPro2

COBRA directly supports VarioPro. There is no special COBRA driver required. The device driver (see 6.1) however is required.

Make sure the communication port in VarioPro is set to USB and Protocol is Default.

Since COBRA 10 you can install a braille display while installation with the first run wizard or afterwards in COBRA menu in Braille, Braille Device.

The separate Program "Braille Control Panel" is no longer required and should therefore not be used.

To add or change a braille display do the following:

- Open COBRA menu with double left Shift key rapidly pressed.
- With cursor right go to 'Braille' and press Enter.
- With Cursor down go to 'Braille Display' and press Enter again.
- COBRA will show which Braille Displays are currently recognized.
- To add or change a braille display TAB to 'Manual Device Configuration' and press Enter.
- In the new Dialog press TAB to get to the list with all supported Braille Devices.
- Now select VarioPro 80 from the list.
- Now press TAB to select the communication port.
- Please select the port where the braille display is connected to.
- Now click on 'Add Device'.
- After some seconds you'll be taken back to the Braille Device dialog again.
- The Braille Display should automatically work with COBRA.
- If not please shut down the computer completely and restart it.
- With a click on 'OK', you'll leave this Dialog.
- And with ESC you'll close COBRA menu.

8.5   VarioPro2 and OSX

This chapter describes how to use a VarioPro2 with OSX Yosemite or later via USB.

VoiceOver directly supports VarioPro2. You do not need a special driver. Not even a device driver has to be installed.

Proceed as follows:

7. On the Mac: open System Preferences > Accessibility and select "Open VoiceOver Utility…"
8. In VoiceOver Utility Dialog move cursor down to "Braille" and select this option.

9. In "Braille" change from tab "Layout" to tab "Displays". To do this, press TAB as often until you hear "Layout" and then move cursor right to "Displays" and select with SPACE.

10. Press TAB until you reach Braille Display Tables. Press TAB until you hear "Add" and select with SPACE.

Now MAC searches for devices. When VoiceOver says a new display is found, use CTRL-OPTION-SHIFT and Arrow down to "BAUM VarioPro2". Press "Select" to connect.

8.6   Other screen readers

Please check the VisioBraille Website and the screenreaders website for a driver or an updated screen reader version supporting VarioPro2 first.

To use the Braille display with a screen reader for which there is currently no driver, switch VarioPro2 to one of the emulations for other Braille displays. In the advanced System Menu, select a suitable Braille display emulation and apply this display to your screen reader. Emulations for "Baum" (Vario 80), "Handytech" and "PowerBraille" are available. Under "port", give the serial port to which the Braille display is currently connected (USB will be treated as a virtual serial port).

9 Key assignment

Standard assignments for commands and screen navigation, depending on the screen reader program.

Please use the latest list from your latest screen reader or driver version!

9.1   NVDA

This is a list of the most used VarioPro2 Hotkeys for NVDA:

D1	= Navigate upwards
D2	= Scroll Braille display to the left
D3	= Navigate downwards
D4	= Shift + Tab
D5	= Scroll Braille display to the right
D6	= Tab
D1D2	= Cursor up
D2D3	= Cursor down
D1D2D3	= read from Cursor
D1D2D3D4	= Taskmanager (control+shift+escape)
D1D2D3D5	= Return
D1D2D4D5	= Settings (Braille)
D1D4	= Move to begin of active window
D3D6	= Move to end of active window
D2D5	= Speech on/off (Speechmodus)
D3D4	= Alt + F4 (Close window)

9.2   COBRA

This is a list of the most used VarioPro2 Hotkeys for COBRA:

D1=Navigate upwards
D2=Scroll Braille display to the left
D3=Navigate downwards
D4=Shift + Tab
D5=Scroll Braille display to the right
D6=Tab

D1D2=Cursor up
D1D2D3=Read from Cursor
D1D2D3D4=show/hide application list
D1D2D3D4D5=open/close COBRA-Quickmenu
D1D2D3D5=Return
D1D2D4=update COBRA-Data
D1D2D4D5=Grade2 on/off
D1D2D5=Help for COBRA-Command keys on/off
D1D3=show/hide unknown Graphics
D1D3D4=open/close COBRAmenu
D1D3D5=run COBRA OCR
D1D3D5D6=Focus tracking in line mode
D1D3D6=Attributes on/off
D1D4=go to top of foreground window
D1D5=switch focus tracking between element- and line mode
D2D3=Cursor down
D2D3D4D6=Navigation in line mode
D2D3D5=toggle 6-/8-dot Braille
D2D3D6=Cursor show/hide - Status
D2D4=toggle navigation between element- and line mode
D2D5=Speech on/off
D2D5D6=Screen viewer on/off
D3D4=Alt + F4
D3D5D6=focus tracking on/off
D3D6=Go to end of foreground window
D4D5=Navigate to mouse
D4D6=Next reading voice
D5D6=Navigate to focus

9.3   JAWS

D1	BraillePriorLine
D2	BraillePanLeft
D3	BrailleNextLine
D4	BrailleToggleCursor
D5	BraillePanRight
D6	RouteBrailleToActiveCursor
D1+D3	BrailleShiftTab
D1+D4	TopOfFile
D1+D5	BrailleEscape
D1+Routing	BrailleDescribeFont
D2+D4	RouteJawsCursorToPC
D2+D5	BrailleToggleMode
D2+D6	BrailleEnter
D3+D4	StartMenu
D3+D6	BottomOfFile
D3+Routing	BrailleSelectText
D4+D5	JAWSDelete
D4+D6	BrailleTab
D5+D6	BrailleBottom
D1+D2+D3	SelectALink
D1+D2+D4	SelectAFrame
D1+D2+D5	HotKeyHelp
D1+D3+D4	MenuBar
D1+D3+D5	OpenListBox
D1+D3+D6	MuteSynthesizer
D1+D4+D5	MinimizeAllApps
D2+D3+D4	StartJAWSTaskList
D2+D3+D5	BrailleToggle8Dots
D2+D3+D6	SelectaHeading
D2+D4+D5	JawsWindow
D2+D4+D6	CloseListBox
D2+D5+D6	CloseDocumentWindow
D3+D5+D6	HotKeyHelp
D1+D2+D3+D4	PreviousDocumentWindow
D1+D2+D3+D5	BrailleAutoAdvance

D1+D2+D3+D6	SetBrailleVerbosity
D1+D2+D4+D5	BrailleGrade2Translation
D1+D2+D5+D6	BrailleGrade2ExpandCurrentWord
D1+D3+D4+D5	NextDocumentWindow
D1+D3+D4+D6	BrailleTurnMarkingOff
D1+D3+D5+D6	SaySystemTime
D2+D3+D4+D5	BrailleAltTab
D2+D3+D4+D6	ReadBoxInTabOrder
D2+D3+D5+D6	ListTaskTrayIcons
D2+D4+D5+D6	WindowKeysHelp
RollBar1 up	BraillePriorLine
RollBar1 down	BrailleNextLine
RollBar1	SayLine
D1+RollBar1	JAWSFind
D1+RollBar1 down	JAWSFindNext
D1+RollBar1 up	JAWSFindPrior
D2+RollBar1 down	JAWSPageDown
D2+RollBar1 up	JAWSPageUp
D3+RollBar1 down	DecreaseVoiceVolume
D3+RollBar1 up	IncreaseVoiceVolume
RollBar2 up	LeftWhizWheelUp
RollBar2 down	LeftWhizWheelDown
RollBar2	PressLeftWhizWheel
D1+RollBar2 down	DownCell
D1+RollBar2 up	UpCell
D2+RollBar2 down	NextCell
D2+RollBar2 up	PriorCell
D3+RollBar2 down	DecreaseVoiceRate
D3+RollBar2 up	IncreaseVoiceRate
RollBar3 up	BraillePriorLine
RollBar3 down	BrailleNextLine
RollBar3	RouteBrailleToActiveCursor
D3+RollBar3 down	DecreaseVoicePitch
D3+RollBar3 up	IncreaseVoicePitch
D4+RollBar3 down	MoveToNextSameElement
D4+RollBar3 up	MoveToPriorSameElement
D5+RollBar3 down	MoveToNextHeading

D5+RollBar3 up	MoveToPriorHeading
D6+RollBar3	SelectAPlaceMarker
D6+RollBar3 down	MoveToNextPlaceMarker
D6+RollBar3 up	MoveToPriorPlaceMarker
RollBar4 up	ShiftTab
RollBar4 down	Tab
RollBar4	SayLine
D4+RollBar4 down	MoveToNextSameElement
D4+RollBar4 up	MoveToPriorSameElement
D5+RollBar4 down	MoveToNextDifferentElement
D5+RollBar4 up	MoveToPriorDifferentElement
D6+RollBar4	SelectAPlaceMarker
D6+RollBar4 down	MoveToNextPlaceMarker
D6+RollBar4 up	MoveToPriorPlaceMarker
Control buttons of the Vario Pro StatusModule	
C1	BrailleToggle8Dots
C2	BrailleToggleMode
C3	BrailleToggleCharactersAndAttributes
C4	SetBrailleVerbosity
Control buttons of the other modules Tm = PhoneModule, Taso = TasoModule)	
Tm C1	BrailleToggle8Dots
Tm C2	BrailleToggleMode
Tm C3	BrailleToggleCharactersAndAttributes
Tm C4	SetBrailleVerbosity
Taso C1	BrailleToggle8Dots
Taso C2	BrailleToggleMode
Taso C3	BrailleToggleCharactersAndAttributes

10 VarioPro2 Rollbars

Rollbars are a unique feature of VarioPro2. They allow for a comfortable and efficient use of VarioPro2. You can move the Rollbar and thus navigate the screen while your readingfingers never leave the braille cells. This speeds up your reading and is less distraction and thus higher efficiency.
This helps a lot while reading documents, filling in forms, navigating tables and all situations where you want to leave your fingers on the braille.
The Rollbar commands are not restricted to simple navigation. There are much more options, the Rollbars can even be programmed specifically to the application running.

10.1 Rollbars and COBRA

VarioPro2 80 has 4 Rollbars R1 to R4. Each may be programmed individually. Each roll has three movements:

- Roll up (U),
- Roll down (D),
- Press roll (C).

Press on roll 3 is described as R3C for example.

Default Rollbar commands in COBRA:
R1C -Navigate to focus
R1D -Navigate downwards, skip blank lines, stay in same column
R1U -Navigate upwards, skip blank lines, stay in same column

R1 navigates the screen without changing it. Skipping blank lines avoids unnecessary finger movements.
R2C -Enter
R2D -Cursor down
R2U -Cursor up
R2 is the normal cursor movement. Very helpful in lists, in Explorer, Outlook, Word.

R3C -Esc
R3D -TAB
R3U -Shift-TAB
R3 jumps with TAB forward and backwards through forms, dialogues, check boxes.

R4C - Enter
R4D - Win TAB
R4U - Shift-Win-TAB

R4 allows for fast task switching. (Under Win 10 program to Alt-TAB)

10.2 Programming Rollbars

The default settings allow fast access to commands for advanced users. Beginners may prefer having the same commands on all four Rollbars. Having the commands for R1 on all four Rollbars would allow for fast navigation.

Open the COBRA menu by double tapping the Shift key. In menu "Extras" select "Key assignments". There you find options to "Modify command", "Modify key" and "Add".

To see the current command on a Rollbar, select "Braille keys" from the listbox in the upper left. Then click somewhere in the list below. Now, press or move a Rollbar. The list will focus the command assigned.

Now, you may select "Modify command" or "Modify key".

10.3 Disable Rollbars

Some users may not like the Rollbars at all. Use the advanced system menu of VarioPro2 to switch them on or off.

11 Common problems and solutions

Minor things can happen which visibly affect the performance of a Braille display but which cannot be called a "real malfunction. A few examples and hints are described below.

The Braille display shows no characters.
Is the USB cable connected to a life PC?
Has a program been launched which is accessing the Braille display's port?
Check that the correct protocol has been loaded.
Was the correct port selected when the screen reader was loaded?

The display is seemingly showing the wrong characters.
Check the cable connection to the computer.

After switching on there is no reaction from the display either when the System Menu is called up or a computer application is launched.
If VarioPro2 does not react, pull out all plug connections and reinsert them after ca. 2 minutes. If the System Menu is still not displayed or the pins flicker quickly, please contact the Service department.

VarioPro2 is switched on and the display suddenly stops reacting.
You have not used the display for longer than the auto-power-off time limit. Move the cursor to 'wake up' the display.

12 Defects and Repair

If VarioPro2 is broken – what to do?

- Did you check all settings and connections according to the manual?
- Are you sure the mains outlet is live?

Do not use a broken device! Unplug broken device from mains! Please do not hesitate to contact your local VisioBraille GmbH dealer or VisioBraille GmbH.

You can reach VisioBraille GmbH at telephone number +49 3641 2816-400 in Germany. We will help you check your VarioPro2 and in case it is broken we can mail a service box for shipping VarioPro2 to our service department. Show this manual to the person who will help you packing VarioPro2 in the service box.

13 Compliances

13.1 Environmentally friendly disposal according to EU-Directive 2012/19/EU

The symbol (crossed garbage can), which is also attached to the device, states that this device and its accessories, once come to the end of its lifetime, should not be regarded as household waste. An environmentally friendly way of final disposal is compulsory.

This device contains electronic components. In order to avoid risks or dangers for the environment through non-professional waste disposal, the disposal of this device and its accessories must correspond to the valid EC-Directives or other local regulations. Please check your local regulations for proper disposing of this device or consult your local distributor.

For data privacy protection reasons, please remove all personal data from the device prior to disposal.

Konformitätserklärung (*Declaration of conformity*)
(nach der Europäischen Verordnung für Medizinprodukte 2017/745/EU)

Wir, die Firma *We, company*	**VisioBraille GmbH** Oßmaritzer Straße 4c 07745 Jena Germany Email: info@visiobraille.de Internet: www.visiobraille.de

erklären in alleiniger Verantwortung für alle unsere Systeme, dass diese mit den folgenden Richtlinien übereinstimmen.
declare under our sole responsibility for all our systems that they comply with the following regulations.

Produktname: VarioPro2 80
(Productname)

UDI: 426241046 009 6

Klassifikation: Richtlinie 2017/745/EU **Medical Device Regulation (MDR)** Klasse I nach Anhang VIII	*Classification:* *Regulation (EU) 2017/745* *medical devices risk class I* *according to Annex VIII*

Erklärung (Declaraton):
Wir bestätigen, dass das Produkt der EU-Verordnung 2017/745 entspricht.
We confirm that the product complies with EU regulation 2017/745.

Unser Qualitätsmanagementsystem ist zertifiziert nach DIN EN ISO 9001:2015.
Our quality management system is certified according to DIN EN ISO 9001:2015.

Die Firma VisioBraille GmbH trägt die alleinige Verantwortung für die Ausstellung der Konformitätserklärung und deren Einhaltung.
VisioBraille GmbH bears sole responsibility for issuing the declaration of conformity and compliance with it.

Gültig bis zur Änderung des Produktes, längstens aber bis zum 31.12.2028
Valid until the product is changed, but no longer than December 31, 2028

Unterzeichner: Herr Thomas Lucas – Geschäftsführer und verantwortliche Person für die Einhaltung der regulatorischen Vorschriften.
Signed by Mr. Thomas Lucas   *SEO and responsible person for regulatory compliance*

Thomas Lucas, Geschäftsführer (SEO)

Jena,
24.02.2023
....
Ort und Datum der Ausstellung
Place and date of issue

....
Name und Unterschrift
Name and signature

14 Warranty

VisioBraille GmbH warrants the device, effective from the date of delivery, to be free of any defects in material and workmanship. Warranty is not transferable and does not apply to groups, multi users or agencies. This device has been designed for the individual purchaser to be used in home or office environments. VisioBraille GmbH reserves the right to repair or replace with a similar or better product. In no event shall VisioBraille GmbH or its distributors be liable for indirect or consequential damages. The original users' remedies are limited to replacement of devices modules/parts. This warranty is valid only when service is done in the country of original purchase and with intact warranty seals. For additional warranty claims or service during or after warranty period, please refer to your local distributor. VisioBraille GmbH does not take responsibility for use of this device other than described in this Manual.

- Warranty on new devices is 24 months.
- Warranty on used or refurbished devices is 12 months.
- Warranty on Consumable parts (Batteries, Braille Pins, Data carriers etc.) is 6 months.
- Warranty on storage media (SD-cards, CD-ROMS, DVD's, etc.) is 90 days.
- Warranty on repairs and spare parts is 12 months.

All defects caused by improper use or users fault are not covered by this warranty.

Warranty will be void if warranty seal is damaged.

Parts replaced during repair are transferred into ownership of VisioBraille GmbH and will not be returned to the customer.

In case of repair the device must be properly packed into its original shipping box.

Costs for packing, shipping and insurance are not covered by VisioBraille GmbH.

15 Important notes

Important note: Failure to observe the following warnings may invalidate the guarantee and could cause damage of the device or serious injury.

Please check the contents of package before you use the device. If parts are damaged or missing, please do not hesitate to inform your dealer.

Please keep the shipping box, so you can safely pack the device in case you have to ship it for service, etc. Improper packaging could cause loss of warranty. In case you need a new shipping box, your dealer can send you one.

Please carefully read the user guide and safety instructions before you use the device for the first time.

This device may only be used in a home or office environment.

Do not place on an instable surface. It may fall causing serious damage to the device or injury to the user. Please follow the instruction on how to place the device especially in respect to avoidance of tilting and falling down by keeping proper space to edges of table.

Do not use the device if you find any damages at device or wires.

If the device appears to be operating abnormally, or to be damaged in any way, please contact your VisioBraille GmbH dealer as soon as possible.

If you smell smoke or an door coming out of the device, unplug the USB-cable.

Do not try to repair the device yourself. Opening or removal of housing may cause damage or injury.

Do not allow sand or dust to come into contact with the device as this may lead to serious damage and could make repair impossible.

Use the device with clean hands only.

Do not use in locations where strong radio waves are emitted or where there is radiation. Keep a distance of at least 30cm to mobile phones.

Only use original accessories. Use of second source accessories may damage the device or cause malfunction or safety issues.

Avoid liquids and food near the device.

Do not use or store the device in any of the following places as this may cause damage:
▪ Inside cars parked with the windows closed in the hot sun.
▪ In direct sunlight or close to heaters, radiators, etc.
▪ Locations subject to severe vibration such as on top of a washing machine.
▪ Locations subject to strong magnetism such as near loudspeakers.
▪ Humid places (bath room), in water, or near water.
▪ In rain or snow
▪ Do not use or store below 0°C / 41°F or above 40°C / 104°F.
▪ Humidity shall be within 20% to 80%
▪ Avoid fast temperature changes

If you bring the device from cold places into a warm room, humidity may condensate. Wait until the device is dry and well-tempered to room temperature before use.

Unplug from mains before cleaning.

Wipe dust and dirt from the device with a soft cloth dampened with a diluted neutral detergent, then wipe dry with a cloth. Do not bring in contact with water.

Do not insert objects into openings.

Do not use device during thunderstorms. Unplug from mains during thunderstorms. We recommend use of an overvoltage protection adapter

for your computer or notebook, which can be bought from your local electro store. Please note, this does not provide a 100% protection from overvoltage.

Do not insert or remove the plug with wet hands.
Do not heat in a microwave oven, on a cooker or similar.
Never disassemble, attempt to repair or modify device yourself.

If liquids or metal fragments should enter device, remove the USB-cable immediately.

Do not pull the plug out by the lead when removing the cable.

Avoid shock. Do not throw or let fall.

Repairs may only be carried out by VisioBraille GmbH service personal or by service technicians authorized by VisioBraille GmbH.

Care and Maintenance

Avoid damp and water.

Use only a clean, dry cloth to clean the housing of the device. Do not use any cleaning fluids or solvents. Wipe dust and dirt from the housing of the device with a soft cloth dampened with a diluted neutral detergent (stay clear from the Braille cells and Roll-bars!), then wipe dry with a cloth. Do not attempt to clean the Braille cells and/or Roll-bars yourself. Contact your dealer for intensive and professional cleaning of your device.

Protect the device from extreme heat, e.g. from the sun, heating units, hot cars etc.

With extreme cold and frost the device becomes inoperable and must be brought slowly back to room temperature. Under no circumstances must the device be warmed up or "thawed out" in a conventional oven, microwave oven or any other heating device!
Avoid any mechanical damage to the housing or accessories

16 Technical details

Desktop 80-cell Braille display for universal connection

Dimensions: 561 x 23.9 x 260 mm (width x height x depth)

Mass: 3720g

Function keys: three keys on both the left and right of the Braille display, one key above each Braille cell and four rollbars on the front edge; designed for various functions and optimised usage.

Ports: USB-C and USB-Hub

Screen Readers: with NVDA, JAWS, COBRA, VoiceOver, and other screen readers.

Power supply: via the USB port