EN Original operating manual

Polizei-Verkehrs-Informations-System [Police-Traffic-Information-System] 86106EN G - 05/2023



PolVis -Full matrix

Type 25140VM-TAB-ECO-V3



horizont

horizont group gmbh Traffic Safety Postfach 13 40 34483 Korbach

Homberger Weg 4-6 34497 Korbach Germany Telefon: +49 (0) 56 31 / 5 65 · 2 00 Telefax: +49 (0) 56 31 / 5 65 · 2 48

traffic@horizont.com www.horizont.com



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1. Tablet control - remote control

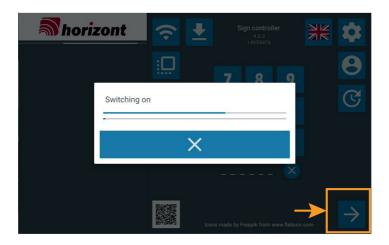
1.1. Overview



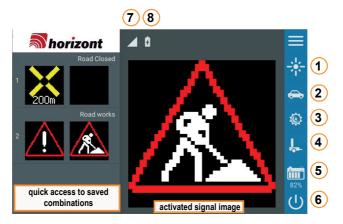
1.2. Turn

To switch on the tablet, press once on the On/Off button. The program automatically starts the connection with the panel; if not, press the arrow once at the bottom right.

The tablet can only run the SiCo app.



1.3. Main menu



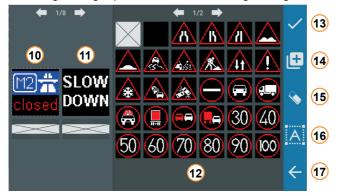
The activated signal image is displayed in the centre of the main menu and can be changed by tapping on the display area. The left area is used to activate stored signal image combinations. Tapping on the characters (1) to (4) displays various submenus in the right-hand menu bar.

The battery symbol (5) indicates the remaining battery capacity.

The LED panel can be switched off via (6). Point 7 shows the signal strength of the wireless connection between the panel and the tablet. Under point 8, you can see the remaining battery capacity of the tablet.

1.4. Submenu signal image selection

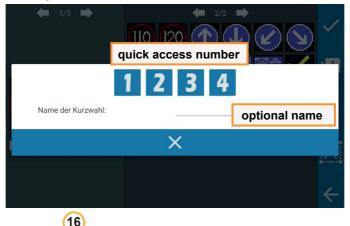
Pressing the activated signal image opens a submenu with the signal image selection.



In the left area of the form, two interchangeable images (10 &11) can be selected for the sign. The image change speed is selected in the main window. If a single image or animation is to be selected, the second slot (level)(11) can be deactivated. The direction arrow keys above the signal images are used to scroll through the already activated traffic signs. To select signal images, select a character in 10 or 11. The currently selected sign is indicated by an orange dashed outline. By selecting signal images (12), the selected character is displayed in 10 or 11. During the selection process, the characters can be deleted by 15. To scroll through the signal images (12), press the arrow keys or swipe your finger to the left and right. The content can be saved (14) for quick activation, discarded with (17) or accepted with (13).

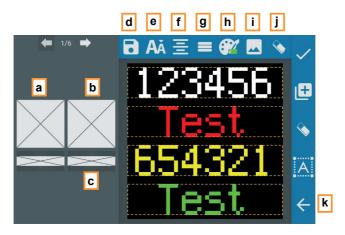


When saving in Quick Slot (14), a new window will open and prompt the user to assign a number to the selected content. Optionally, the user can also assign a name to the defined combination, but this must be done before selecting the slot number.



1.6. Submenu text creation

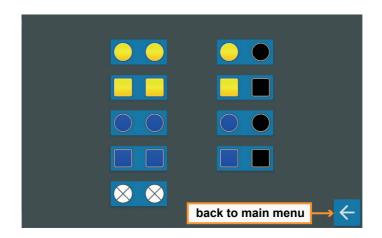
In addition to pre-installed content, free text entry is possible. Pressing the text entry (16) in the signal image selection will open a new form.



As in the signal image selection, a preview of the currently selected content is displayed (a and b). Next to the text selection are text fields that can be configured with the number of text fields per character(q) and the text size(e).

To enter a colour text, the text colour must first be selected with (h). To start text input, click on one of the dashed orange rectangles (a,b or c). This will open the Android® keyboard. To delete the entire written text, press (j). The text form also allows image input (i), where an image is placed below the text input. After the text has been entered, it can be saved with (d), deleted with (j) or discarded with (k). When a text entry is saved, the text form is displayed on the selected sign. Text alignment can be set by pressing the button (f). 5

1.7. Submenu flasher

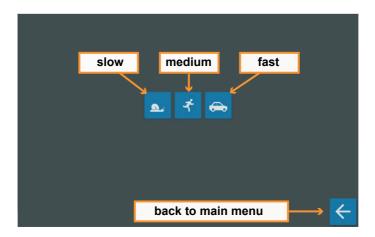


The Flasher (1) button opens a new window in which the displayed signal images can be flashed or deactivated. Yellow and blue flashers are available in round (7 pixels) or square (8x6 pixels).

2

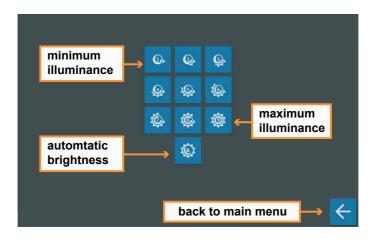
Please use left column for synchonous flashers or right column for alternating flashers.

1.8. Submenu panel image switching speed

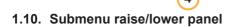


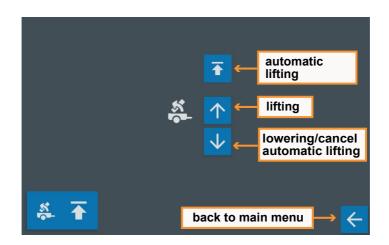
The panel image switching speed button opens a new form in which the animation speed can be set to slow, medium or fast.

1.9. Submenu luminance level



The luminance level (3) button opens a new window where the brightness can be set manually or automatically from 1 to 9. The use of automatic brightness is recommended as it provides optimal brightness for the ambient conditions.





The raise (4) button opens a new form where the user can raise or lower the panel.

2. Speed-dependent lowering (option)

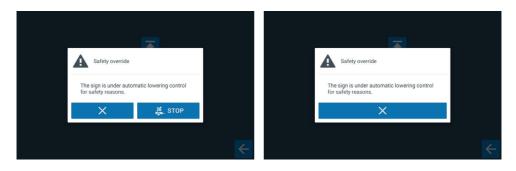
With this optional equipment, the LED panel lowers when the factory-set top speed is reached. The speed is determined using a GNSS sensor (GNSS = global navigation satellite system).



In areas with poor satellite coverage or the system is switched off, this function is only available to a limited extent or not at all. This can be the case, for example, in tunnels or in densely built areas.

During the lowering process, a pop-up message appears on the remote control display and remains visible until confirmed by the user.

As long as the set maximum speed is exceeded, it is not possible to lift the LED panel again!!



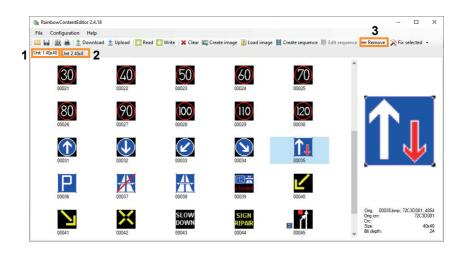
3. RCE program for transferring signal images to the tablet

The RCE program enables the transfer of new images or complete data sets to the tablet. This is done by connecting the table via the USB-C port. Drivers do not have to be installed. To load new signal images onto the tablet, open the RCE program supplied. to write (1), press on the symbol. In the new dialogue window, select the tablet (2) and select the Marvin processor (3). Finally press (4) to transfer the loaded character set to the tablet.



3.1. Main Menu

In the main window of the program, selecting tabs 1 to 2 will show the signal images stored on the bottom panel (1) and in the text field (2) on the bottom panel. Additional signal images can be added using drag & drop. Selected contents can be removed by pressing (3).



3.2. Loading or saving character sets

Existing character sets can be loaded into the program or newly created character sets can be saved. To load an existing character set, select the required character set in the top area of the software "File->Open from zip"(1). To save a data set, select "Save to zip" (2).









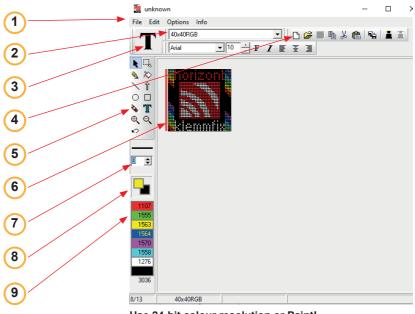
4. Character creation program 'LED panel'

With the program 'LED panel', you can very easily create traffic signs for the LED advance warning panel and modify already created ones. The program applies all necessary checks (sign size, signal image colours as well as maximum number of LEDs used).

During installation, the program automatically applies the set system language of the PC, which can, however, be changed later in the menu bar.

After the program is started, the following screen appears:

After the program is started, the following screen appears:



Use 24-bit colour resolution or Paint!

4.1. Menu bar

Among other things, you can open and save signal images, select their panel size / type, display an auxiliary grid or select the user language (German, English or French).

4.2. Panel selection

From this menu, you can select the LED panel you would like to create new signs for.

The designation consists of the following:

e.g. 40x40RGB

40x40 - WxH for pixels of the top panel

RGB - LED colours of the top panel RGS

4.3. Line texts

Only touchscreen remote control !!

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Depending on the selected panel (see 2.4.2.1), line texts or symbols for the touch screen remote control can be created by selecting this tool. After being transferred with SignLoad (see 2.3.2.), these texts can be selected in the different lines on the touch screen remote control (see 1.3.10.). The arrangement of the texts on the touchscreen remote control does not have to correspond to the arrangement during creation.

4.4. Toolbar

Using this bar, you can quickly clear the two panels, open and save files, select the font, and more.

4.5. Tools

k	Pointer:	Moves selected elements
C.	Selection:	Selects a specific area
Ø	Line:	Creates freehand lines or single dots
\approx	Fill tool:	Fills in an area
1	Rubber band line:	Creates a straight line when holding down the left mouse button
Î	Directional arrow:	Creates a directional arrow when holding down the left mouse button
\bigcirc	Circle:	Draws a circle when holding down the left mouse button
	Rectangle:	Draws a rectangle when holding down the left mouse button
Ś.	Eraser:	Clears individual dots or areas
T	Text:	Creates text (text flow, text type and position can be changed during input. This is no longer possible after switching to another tool)
€	Zoom in:	Enlarges the screen area
Q	Zoom out:	Decreases the screen area
Ø	Undo:	Discards the last change

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4.6. Workspace

The red bar on the left side of the LED advance warning panel symbol indicates the selected and editable area with the pointer. You can draw or write texts in this area.

4.7. Line width menu

Setting of line width for the tools.

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4.8. Colour menu

This menu shows the currently selected character and background colour.

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4.9. Colour selection and pixel count menu

To change the drawing colour, click on the desired colour with the left mouse button. Correspondingly, click on a colour with the right mouse button to change the background colour. Colours that are not allowed are displayed crossed out and blocked.

5. Overview PolVIS - VM

5.1. LED - Matrix

- Display of all common traffic signs with RGB LEDs
- Ø 810 mm, △ 830 mm, □ 810 mm
- Flashing light or continuous light
- Dimension of LED sign: 855 x 855 x 135 mm (standard panel)
- Phantom light tested in accordance with EN12966
- Pixels: 1,600 RGB, each dot is freely programmable
- Display of graphics and/or text *)
- Automatic brightness adjustment, additional 9 fixed values selectable
- Flashing frequency selectable in 3 steps
- approx. 700 characters can be programmed on request (depending on the remote control)

5.2. Programming

Further traffic signs, lane guidance, etc. and texts, e.g. ACCIDENT, OIL LINE, STOP, etc. can be programmed on request.

5.3. Technical data

Flash rate15-60 x per minuteAmbient temperatures-30°C to +70°CProtection classIP 55Beam width according to EN12966B6Luminosityup to 15400 cd/m2 for whiteLEDsRGB

When connecting the system to the supply voltage, please note that the standby current is permanently 500mA !!!

5.3.1. Luminance level

and

There are various levels available for setting the luminance level (manual and automatic regulation). The luminance level refers to standard EN12966:2005

5.3.2. Optical data

Phantom light test according to EN 12966

LED Colour	Classification according to EN 12966-1:2005+A1:2009											
LED Colour	Luminance	Colour	Beam width									
Red	L3*	R3	C2	B6								
Green	L3*	R3	C2	B6								
Blue	L3*	R3	C2	B6								

5.3.3. Electrical data

Rechargeable battery	12V / 24V (depending of code)								
Power consumption (A)		Maximum							
Illumination level	1	5	9	9					
40x40R20_RGB (Reference image)	0,8 A / 0,4 A	1,2 A / 0,6 A	1,5 A / 0,8 A	1,5 A / 0,8 A					
FB - PDA (max. charging cur- rent)	1.0 A	1.0 A	1.0 A	1.0 A					
FB - tablet (max. charging current)	1.0 A	1.0 A	1.0 A	1.0 A					
Total	1,8 A / 1,4 A	2,5 A / 1,8 A							

Reference image:

Active LEDs

Top panel: RGB 401 pcs.



5.3.4. Maximum Speed

Max. speed with lifted board Max. speed with lowered board 80km/h 130km/h

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