

MAXAM

VIBRAZEB VM-7TSR2



ZEB

USER GUIDE

Version 1.3

11.2025

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MAXAM Deutschland GmbH – ZEB
Boschstr. 10
45770 Marl
Germany

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3 Declaration

Vibration Meter VibraZEB VM-7TSR2

Manufacturer:

MAXAM Deutschland GmbH, Boschstraße 10a, 45770 Marl, Deutschland

Based on test results using appropriate standards, the product complies with:

Directive 2014/30/EU, Electromagnetic Compatibility (EMC) Directive 2014/35/EU, Low Voltage (LVD)



This conformity is indicated by the symbol "Conformité européenne"

Warning

Read this safety documentation carefully before using the device.

4 Safety

Warnings or precautions are included throughout the manual, if applicable. A precautionary measure indicates measures and situations that can lead to damage to the measuring device. An alert indicates actions and situations that pose a risk to the user of the device. Always follow the instructions in the manual to use the vibration meter safely.

If the device is used in a way that is not specified in the user manual, the warranty can no longer be given.

The device is IP-54 protected against environmental influences. To ensure this protection, you must follow the following procedures:

- Always use the plug caps.
- If you are using the power plug (RJ45), serial plug, or USB plug in wet or dirty environments, you need to use a special protective plug. Contact your provider to get this special plug.
- When connecting a plug to the device (power, geophone, microphone, etc.), check that the plug is plugged in properly.

5 Warnings

Battery: This device uses lithium-ion batteries. Do not use it in environments not described in the device specifications and/or in corrosive environments.

Do not place the appliance near heat sources, environments with high temperatures, direct sunlight, furnaces or pressure vessels. Do not expose it to temperatures above 60°C (140°F). Otherwise, the battery could be damaged and lead to acid leakage, heating, and even fire or explosion.

Do not drill or open the battery. If the battery leaks acid and you touch it, wash it off immediately with water and go to the doctor.

Charging temperature: 0°C to +45°C

Standard working temperature: -10°C to +55°C

Storage temperature (short-term): -20°C to +60°C

Storage temperature (over a long period of time): -20°C to +25°C


The battery can be recycled or disposed of properly. Use only the power adapter that came with the device.



WEEE Directive

This symbol means that the appliance is not household waste. According to Directive 2012/19/EU for Waste Electrical and Electronic Equipment (WEEE), the equipment cannot be disposed of as normal waste. Return the device to the seller or dispose of it at the recycling point in your city.



Note: The rechargeable lithium-ion batteries that the device is equipped with come with a charge level of approximately 30%. However, due to the time they have not been used, the batteries should be fully charged before using the device. For safety reasons, the fuse was removed from the socket during transport. It must be reinserted into the fuse holder before operating the device. 

6 *Scope of delivery*

The standard equipment is:

- Vibration Meter (VM-7TSR2)
- GS3T or alternative sensor options
- 12V charger
- Thumb drive
- Windows Vibration Meter Analyzer

Optional depending on the configuration chosen:

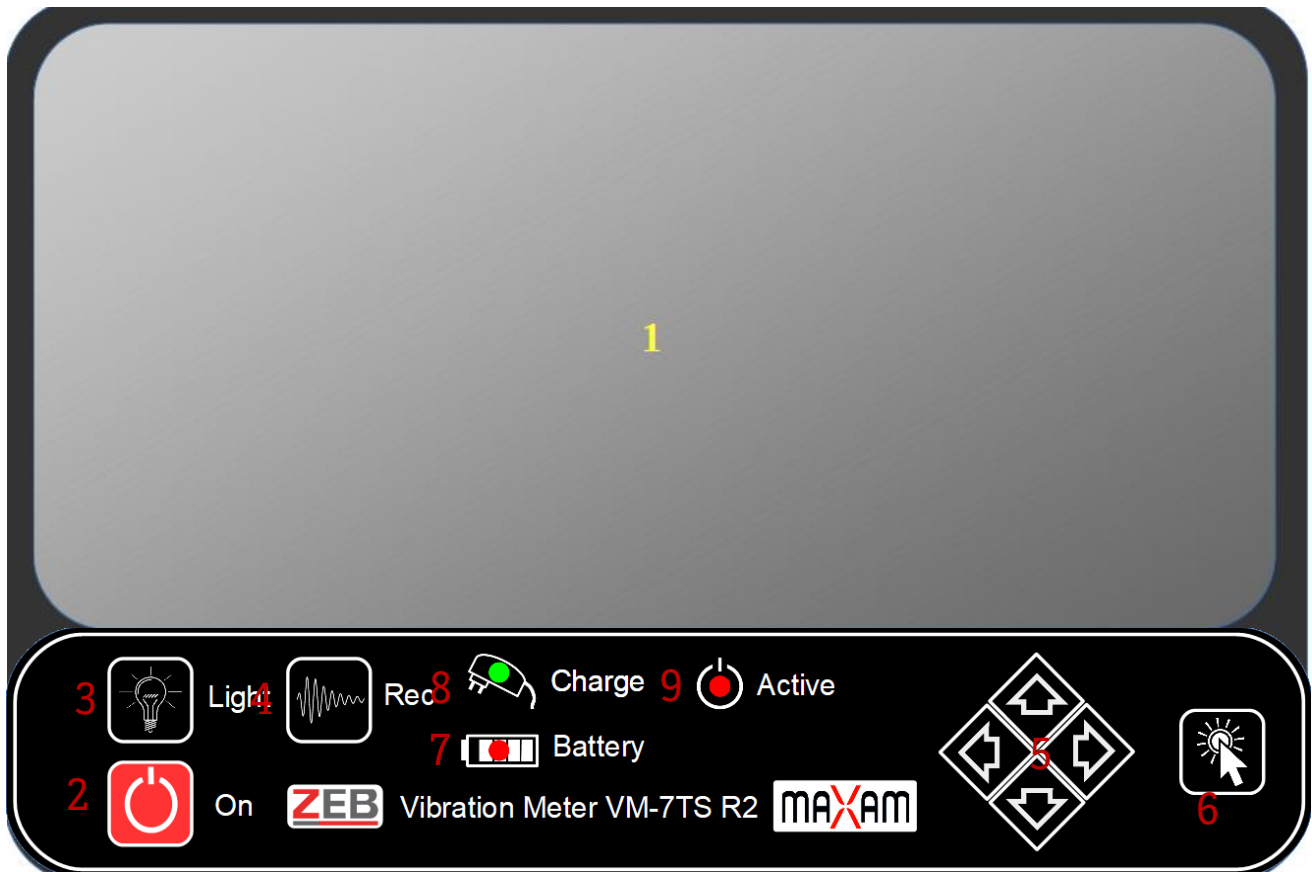
- Triaxial sensor block with 1-315Hz frequency range for channels 1-3 with leveling plate and 5m black flexible connection cable.
- Triaxial sensor block with 1-315Hz frequency range for channels 4-6 with leveling plate and 5m blue flexible connection cable.
- 2 channel sensor block with 1-315Hz frequency range for channels 1-2 with leveling plate and 5m black flexible connection cable.
- 1 channel sensor block with 1-315Hz frequency range for channel 3 with leveling plate and 5m blue flexible connection cable.
- Metal spikes for soft surfaces indoors
- Mobile printer with power supply, connection cable and paper
- Alarm system with power supply and connection cable
- LTE/4G router with power adapter and network cable
- Orange flexible extension cable for sensor blocks up to 80 m total (standard length 30 m)
- Microphone with 5m connection cable and tripod

7 Housing and functions

7.1 Front panel

Depending on the custom accessories and options, some parts of this manual may not be applicable to the device. Only pictures of the PE version are shown.

The front panel of the device looks like the following image:



Explanation of the elements:

1. TFT screen with capacitive touch panel
2. On button: Press this button to turn on the device.
3. Light Up Button: It turns on the screen. (Press and hold for 8 sec for reset)
4. Shutter button: short press creates an event
5. Arrow keys: Allows operation if touch input is not possible
6. Select button: Use this button if touch is not possible.
7. Battery Charging LED: Lights up while the battery is charging.
8. Power Supply LED: Lights up when an external power supply is connected.
9. On LED: Flashes when the device is on.

7.2 Connections

On the right side of the device are the waterproof sockets for power supply, sensor blocks and microphone.



Overview Page:

- POWER: Power supply and external trigger
- BLOCK 1: Sensor block 1 (channels 1-3)
- BLOCK 2: Sensor block 2 (channels 4-6)
- MIC: Microphone (channel 4 or 7)

The accessory interfaces are located on the back of the device:



Overview back:

- USB: Socket for USB disk or printer
- NET: Network socket RJ45 (function optional)
- SIM: SIM card slot (function optional)

7.3 Touch keyboard

If characters are required in a text box, the on-screen keyboard is displayed.



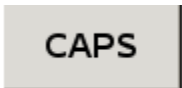
Special symbols:



Delete all characters



Delete Last Character



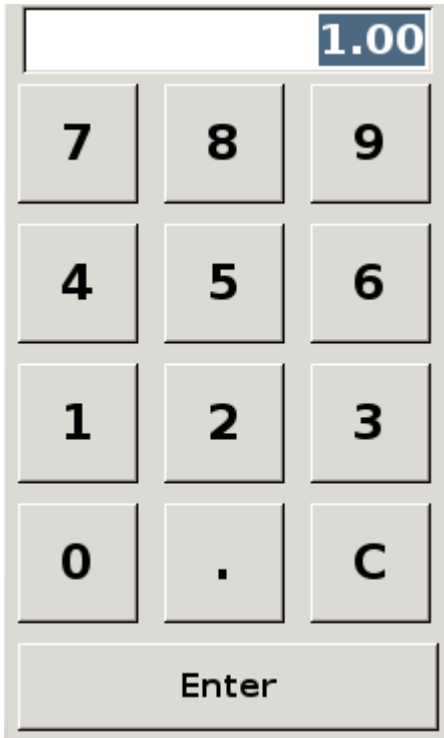
Toggle between lowercase and uppercase letters



Accept and Exit

7.4 Keyboard

If a text box needs a value, the keyboard will appear.



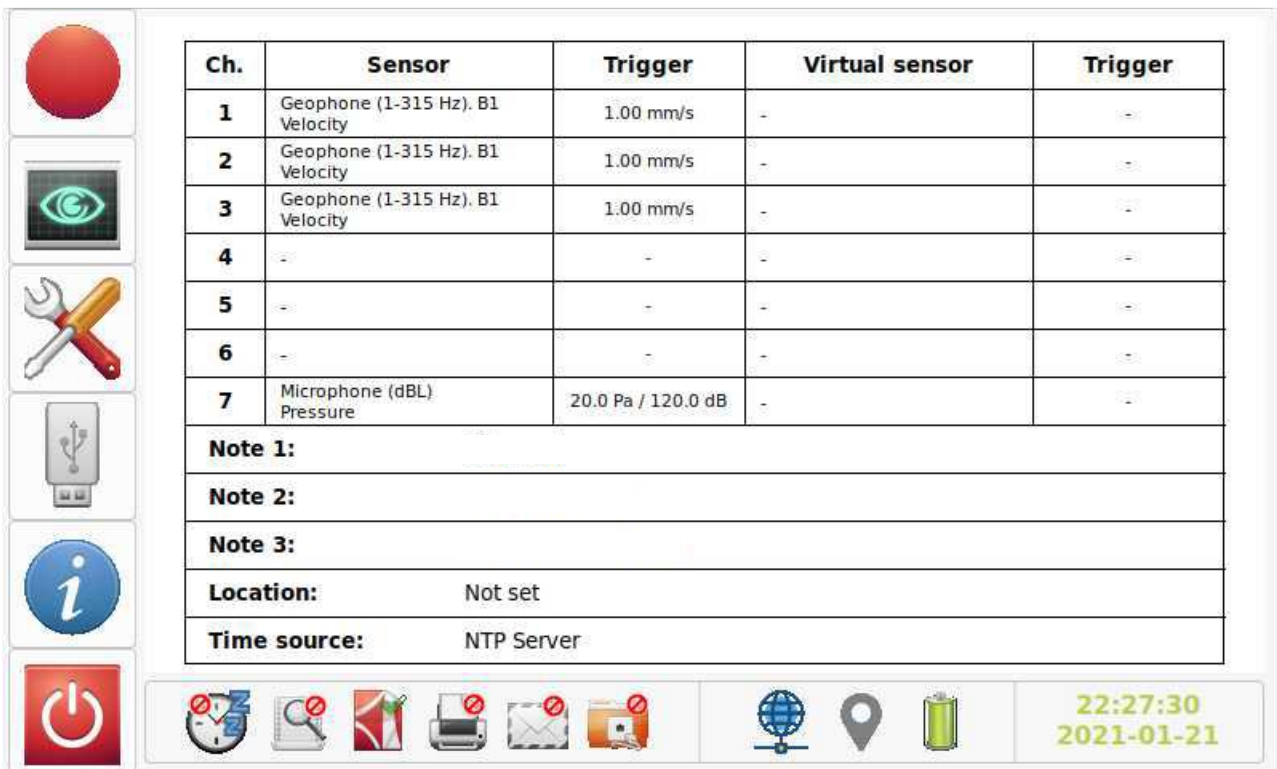
"C" (CLEAR) deletes the values. Press "Enter" to accept and close.

8 Use of the device

8.1 Power on and main screen

To turn on the device, press the "ON" button. The device takes 20-25 seconds to turn on. Note that sometimes the device performs a memory check. This process can take anywhere from 1 to 2 minutes. Although this process is not common, this boot time does not mean that there is a malfunction.

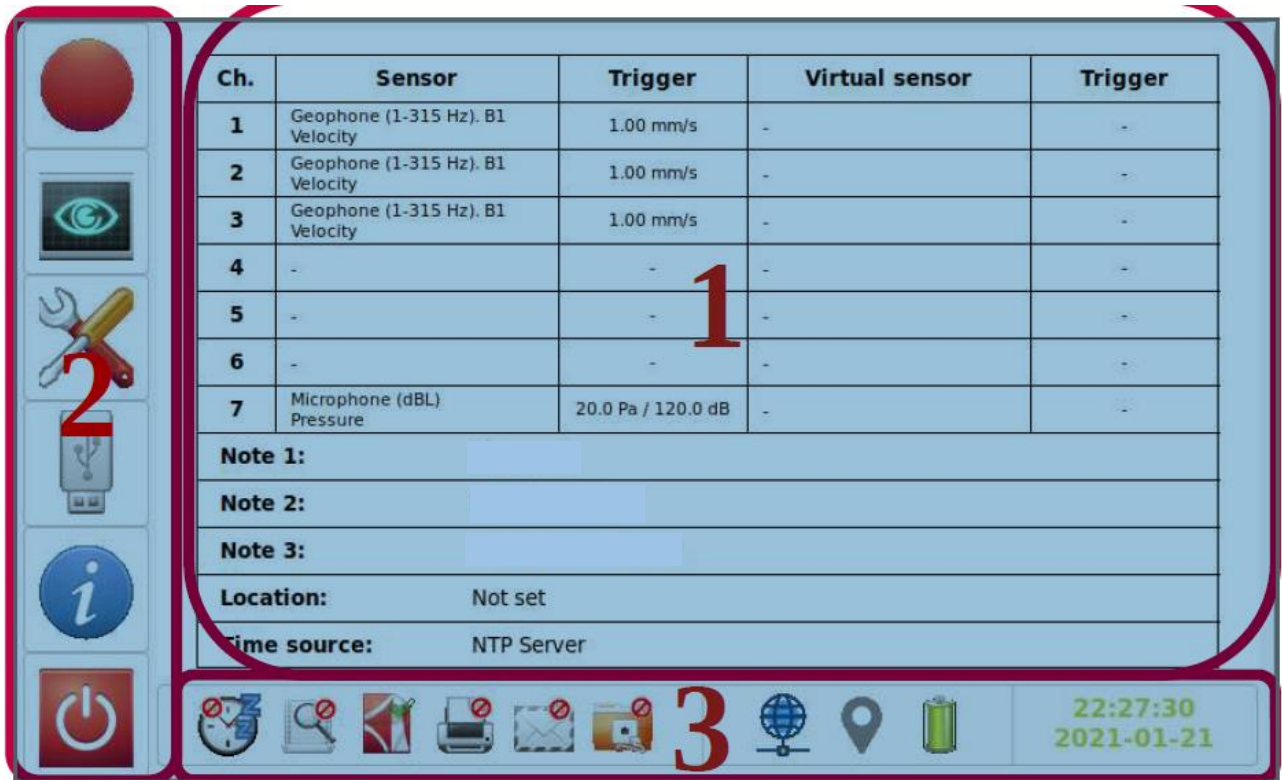
After turning on the device, you will see this screen:



With this device, the connected sensors are automatically detected.

Please connect all sensors before starting the device.

The screen is divided into three sections:









1. Device configuration information.











2. Buttons for actions.

3. Toolbar and Status

Buttons for actions:







-  Record button
-  Event viewer
-  Configuration
-  Data transfer to USB stick
-  Information Menu
-  Switch off

8.2 *Toolbar and Status*

-  Timer setting
 -  Create log file
 -  Create PDF file
 -  Activate the print function
 -  Activate e-mail function
 -  FTP Upload
 -  Internet connection
 -  GPS connection
 -  Battery level
 -  Date and Time
- 23:01:34
021-01-21

8.3 *Recording*


When you press the record icon, the following functions are displayed:


-  Threshold (trigger) based event recording
-  Bar display: Only the clock maximum value is recorded (30sec)
-  Both: Combination of function and bar display
-  Update: If the sensor block has only now been connected
-  Duration
Record Time:
2 s
-  Back

After a recording has started, this screen will be displayed. Both the instantaneous and the maximum vibration values can be read here.

	Current	Frequency	Maximum	Frequency
Channel 1	3.90 mm/s	5 Hz	3.90 mm/s	5 Hz
Channel 2	3.36 mm/s	10 Hz	3.36 mm/s	10 Hz
Channel 3	4.41 mm/s	15 Hz	4.41 mm/s	15 Hz
Channel 4				
Channel 5				
Channel 6				
Channel 7	21.9 Pa / 120.8 dB	35 Hz	21.9 Pa / 120.8 dB	35 Hz

	Current	Maximum
Vector sum 1	6.74 mm/s	6.74 mm/s
Vector sum 2		

Time recording:	00:00:06	Trigger 
Last trigger at:	00:00:06	

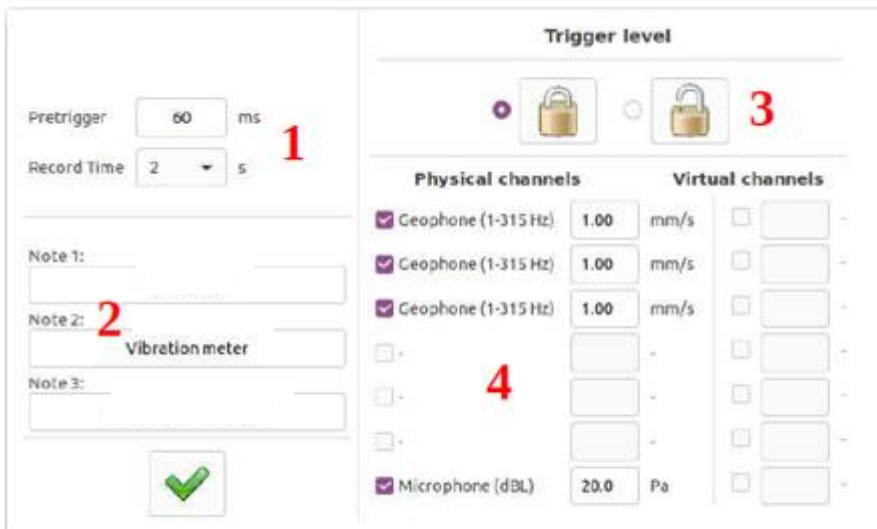


8.4 Configuration

The following settings can be made:



Configuration of the dataset:



The screenshot shows a configuration window with several sections. On the left, there are input fields for 'Pretrigger' (60 ms) and 'Record Time' (2 s), with a red '1' next to the 'ms' unit. Below these are three 'Note' fields; 'Note 2' contains the text 'Vibration meter' and has a red '2' next to it. A green checkmark icon is at the bottom left. On the right, the 'Trigger level' section has two lock icons, with the second one being open and having a red '3' next to it. Below this are two columns: 'Physical channels' and 'Virtual channels'. The 'Physical channels' column has four rows, with the first three checked and having a red '4' next to the second row. The 'Virtual channels' column has four rows, all unchecked.

Physical channels		Virtual channels	
<input checked="" type="checkbox"/> Geophone (1-315 Hz)	1.00 mm/s	<input type="checkbox"/>	
<input checked="" type="checkbox"/> Geophone (1-315 Hz)	1.00 mm/s	<input type="checkbox"/>	
<input checked="" type="checkbox"/> Geophone (1-315 Hz)	1.00 mm/s	<input type="checkbox"/>	
<input type="checkbox"/> -	-	<input type="checkbox"/>	
<input type="checkbox"/> -	-	<input type="checkbox"/>	
<input type="checkbox"/> -	-	<input type="checkbox"/>	
<input checked="" type="checkbox"/> Microphone (dBL)	20.0 Pa	<input type="checkbox"/>	

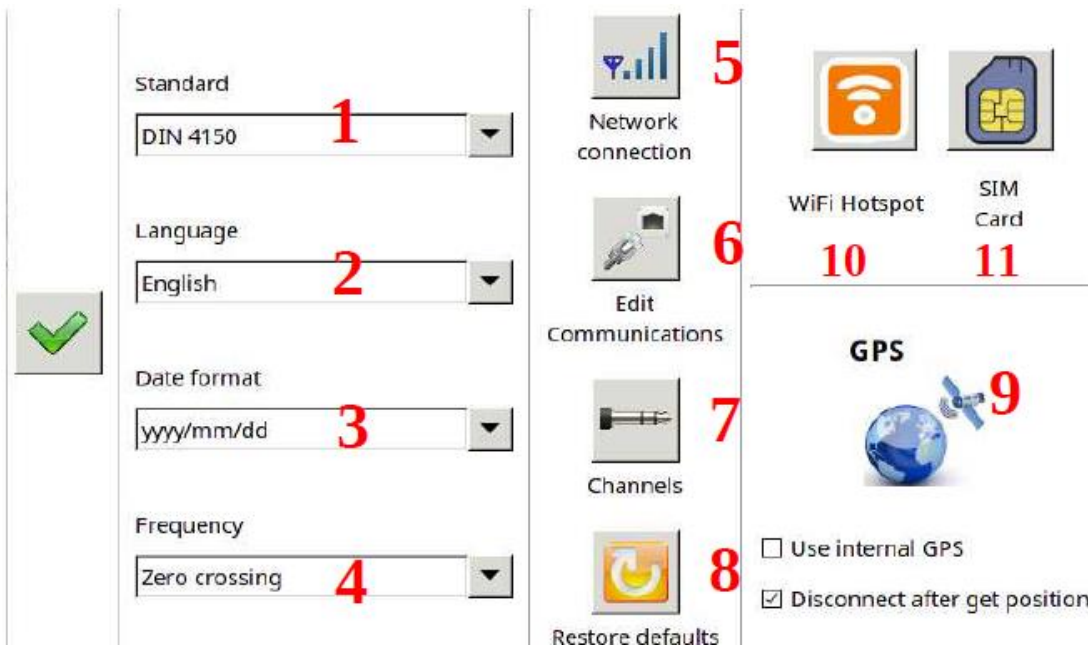
1: Pre-trigger - can be set up to a value of 1000ms

2: Measurement Notes

3: Selection of channels to be considered for triggering

4: Activation of the other channels

8.5 System configuration



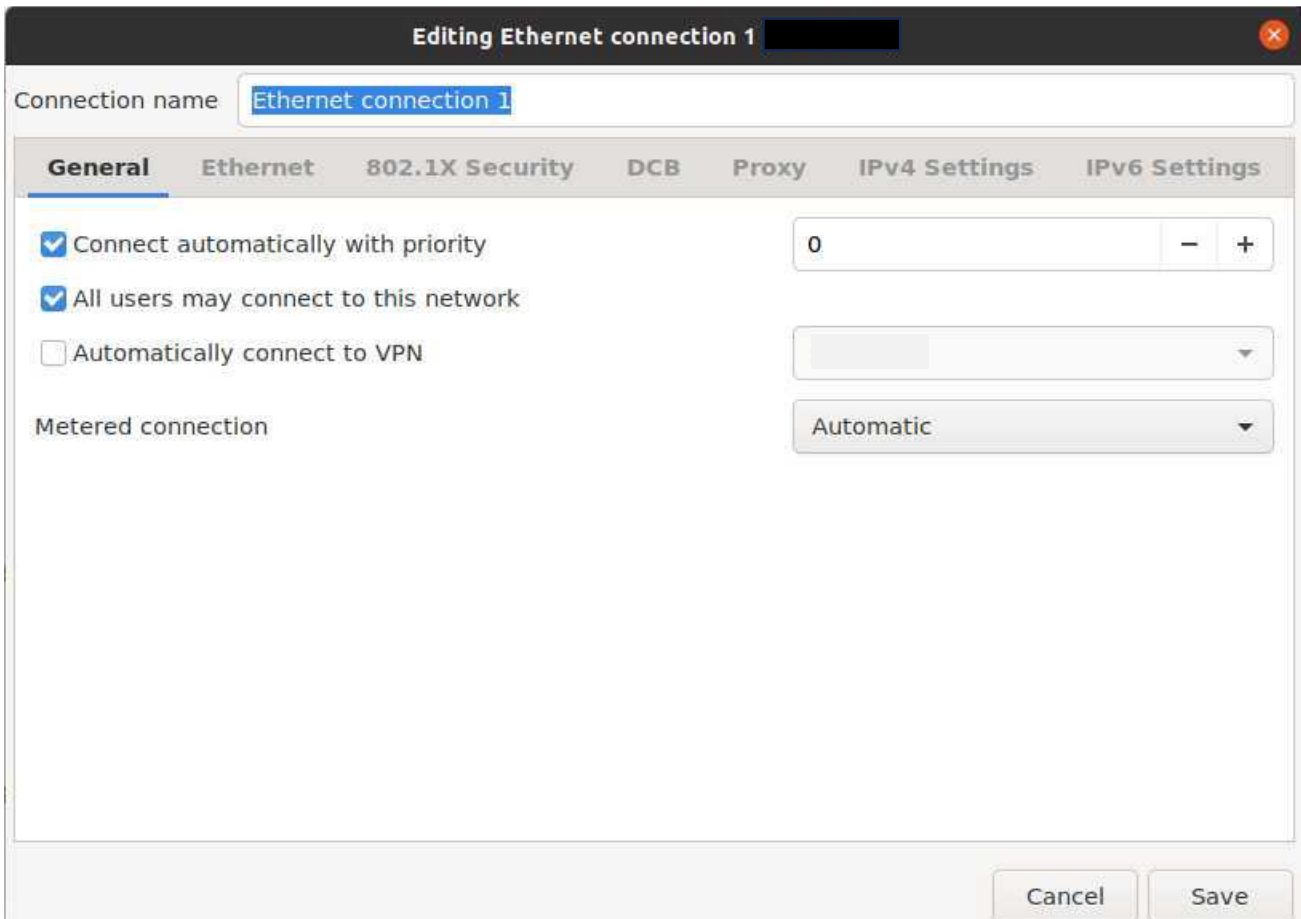
1. Choose the vibration standard
2. Choose the language
3. Choose the date format
4. Choose the method to calculate the frequency
5. Open the Network Connection dialog box
6. Opening the Network Configuration Dialog
7. Open the Channel Configuration dialog box.
8. Factory reset
9. Open the GPS configuration dialog
10. Create a WIFI hotspot
11. Open the SIM card configuration dialog

8.6 Network

Click button 5 to access the network connection

Ethernet connection:

To configure an Ethernet (LAN) connection, follow these steps:



Connection Name:

Enter a name for your connection or keep the default name. Configure the other options according to your LAN network configuration.

Modem:

To use this option, you must have the internal modem installed in the device and a SIM card inserted into the socket. The configuration is almost identical to the one explained in the Ethernet connection.

WIFI connection:

You can create a wireless connection according to your Wi-Fi settings in your router.

Configuration of the channels:

This option allows you to configure the advanced measurement options. Special modules are required to use these options.

Mail configuration:

Enter up to three email addresses in the status "Sent" and "Alarm Mails". (See the web server part of this manual)

Mail server configuration:

Here you can manually set up an e-mail server or click on the button "Use ZEB server".

Mail addresses configuration

Server


Sender

User

Password

Port

SSL



Mail Server FTP / SFTP Server Upload options

8.7 Setup of communication

This option is available only if the communication module is installed.

If you select this option, you will see a window with a virtual keyboard and another window with the communication options. For this configuration, it is highly recommended that you use the buttons instead of the touch panel to move and click the options.

Default:

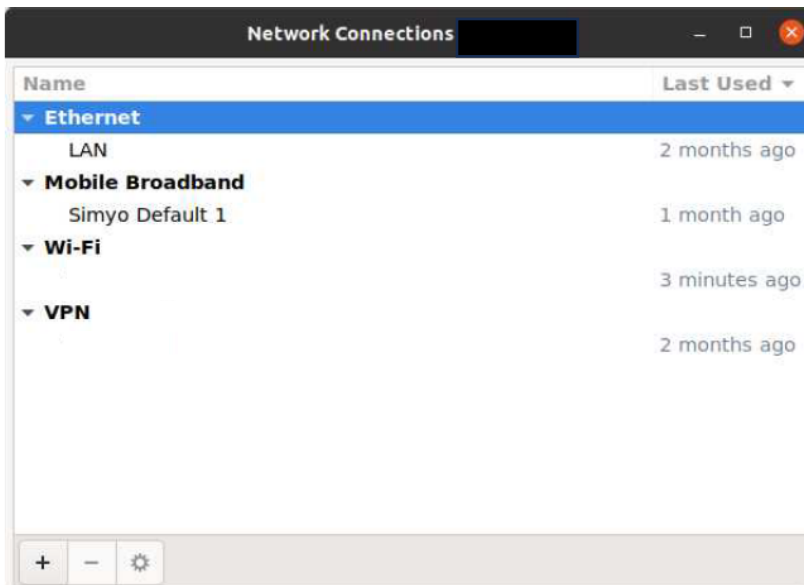
IP address: 192.168.1.45

SUBNET MASK: 255.255.255.0

IP Gateway: 192.168.1.1

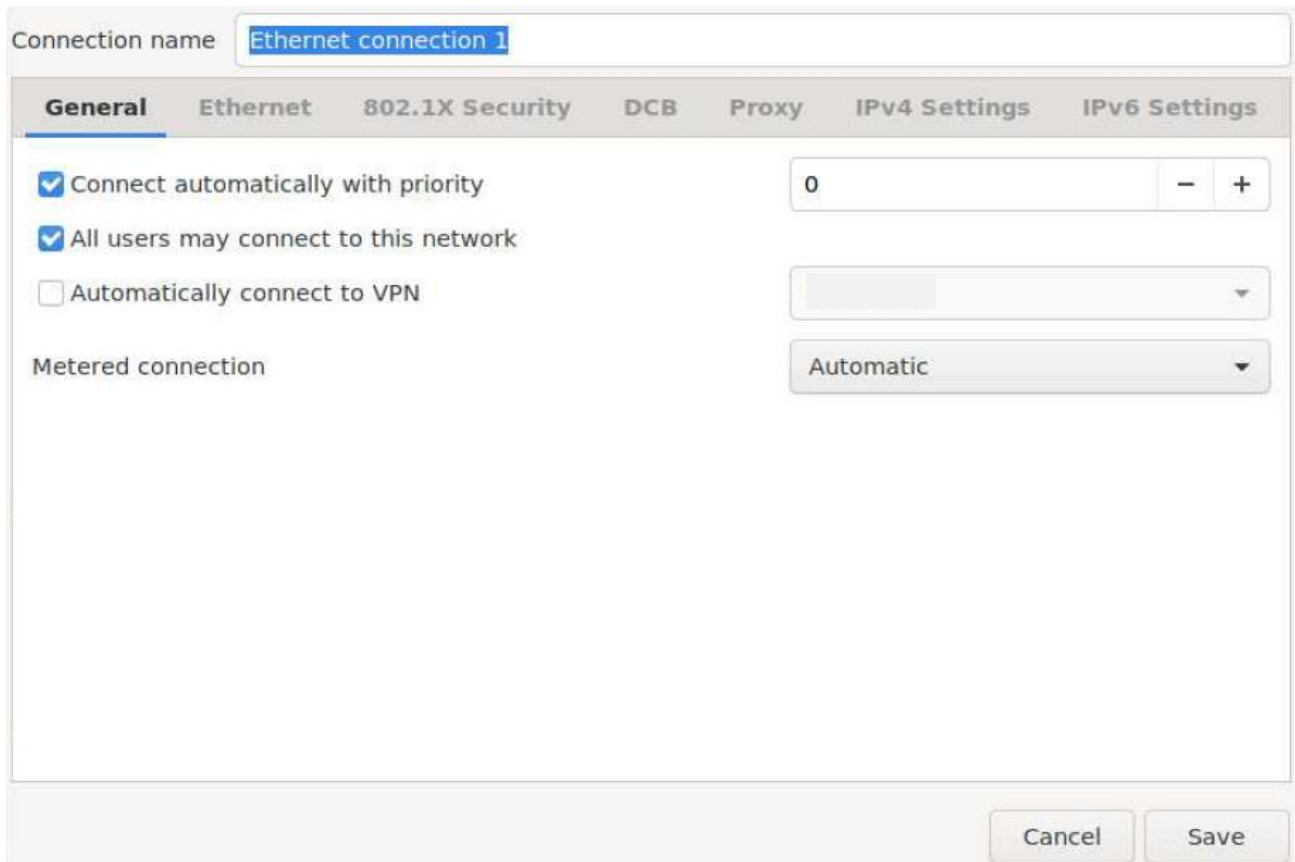
Adding a new connection

Press "Add" (+) and enter the name of the new connection.



Select "Properties" (gear icon) to set up all the values you need.

All settings can be made in the properties menu.



If possible, use a static IP address, which can be set in the **IPv4 Settings** menu, and save with "Save".

8.8 View Events

	Maximum	Frequency
V (B.1)	3.62 mm/s	22 Hz
L (B.1)	7.51 mm/s	19 Hz
T (B.1)	7.36 mm/s	17 Hz
Mic	7.30 Pa / 111.2 dB	3 Hz
Vsum 1	8.27mm/s	t = 556 ms
2021/01/15 - 12:24:40 (2 s) P.1		

File: 3C00ED2C60800.sis
Record: 1/1

(1)

All

Datei: 58D14FD900001.sis **Record information:** File name and number of records stored
Ereignis: 1/1

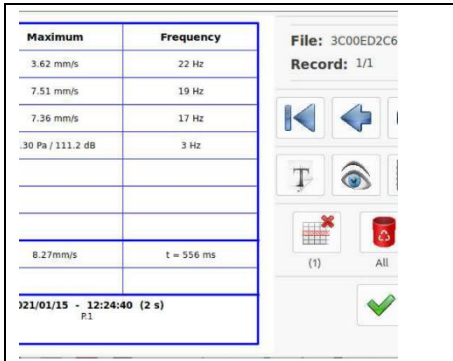

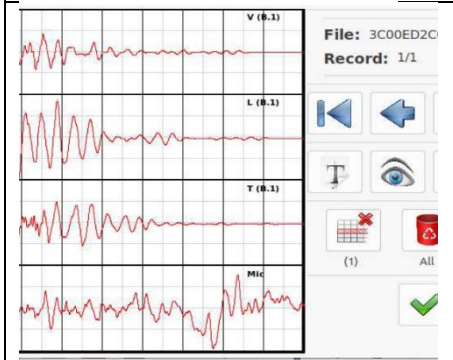

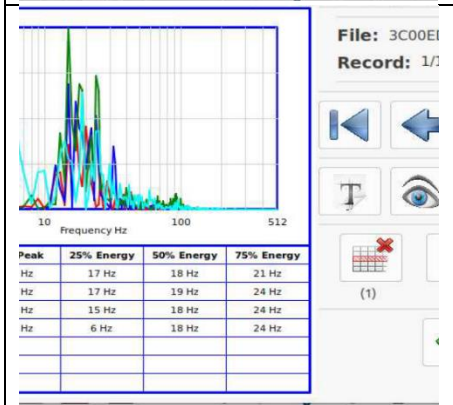

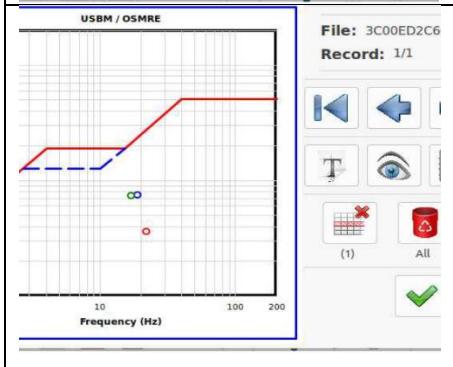

Event selection: first/previous event and next/last event

Delete Event: Deletes the current (1) event record

Delete All Events: Deletes all stored event records

Print: Prints a report of the current event to the mobile printer

An overview of the different views can be found on the next page.

 <table border="1"> <thead> <tr> <th>Maximum</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>3.62 mm/s</td> <td>22 Hz</td> </tr> <tr> <td>7.51 mm/s</td> <td>19 Hz</td> </tr> <tr> <td>7.36 mm/s</td> <td>17 Hz</td> </tr> <tr> <td>30 Pa / 111.2 dB</td> <td>3 Hz</td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td>8.27mm/s</td> <td>t = 556 ms</td> </tr> </tbody> </table> <p>121/01/15 - 12:24:40 (2 s) P1</p>	Maximum	Frequency	3.62 mm/s	22 Hz	7.51 mm/s	19 Hz	7.36 mm/s	17 Hz	30 Pa / 111.2 dB	3 Hz			8.27mm/s	t = 556 ms	<p> Text Overview: Displays date, time, maximum amplitudes, frequencies, and mix values, if any</p>						
Maximum	Frequency																				
3.62 mm/s	22 Hz																				
7.51 mm/s	19 Hz																				
7.36 mm/s	17 Hz																				
30 Pa / 111.2 dB	3 Hz																				
8.27mm/s	t = 556 ms																				
	<p> Curve: Displays the waveform or bar graph of the event</p>																				
 <table border="1"> <thead> <tr> <th>Peak</th> <th>25% Energy</th> <th>50% Energy</th> <th>75% Energy</th> </tr> </thead> <tbody> <tr> <td>Hz</td> <td>17 Hz</td> <td>18 Hz</td> <td>21 Hz</td> </tr> <tr> <td>Hz</td> <td>17 Hz</td> <td>19 Hz</td> <td>24 Hz</td> </tr> <tr> <td>Hz</td> <td>15 Hz</td> <td>18 Hz</td> <td>24 Hz</td> </tr> <tr> <td>Hz</td> <td>6 Hz</td> <td>18 Hz</td> <td>24 Hz</td> </tr> </tbody> </table>	Peak	25% Energy	50% Energy	75% Energy	Hz	17 Hz	18 Hz	21 Hz	Hz	17 Hz	19 Hz	24 Hz	Hz	15 Hz	18 Hz	24 Hz	Hz	6 Hz	18 Hz	24 Hz	<p> Frequency analysis: Displays frequencies as a table and graph</p>
Peak	25% Energy	50% Energy	75% Energy																		
Hz	17 Hz	18 Hz	21 Hz																		
Hz	17 Hz	19 Hz	24 Hz																		
Hz	15 Hz	18 Hz	24 Hz																		
Hz	6 Hz	18 Hz	24 Hz																		
	<p> Prevention Criteria: Displays peak values in the selected criteria table</p>																				

8.9 Email Setup

This panel is intended for the basic configuration of the mail server. For more advanced options, use the WEB interface (see the WEB Server section).



Mail addresses configuration

Server

Sender

User

Password

Port

SSL

Send a test email to check the server settings.

Server: Out server for sending e-mails

Sender: Sender email address for server login

User: Login name for email server authentication

Password: Password for logging in to the email server

Port: Login port of the email server

SSL: Enable SSL encryption.

You can select the email server preferences by clicking on "use ZEB mail server".


Note: By default, a MAXAM account is used to send mails. This account will also be reused when factory settings are loaded. The account is unmanaged. You will not be notified if a recipient could not be reached.

You can also set up your own mail server.

8.10 File transfer

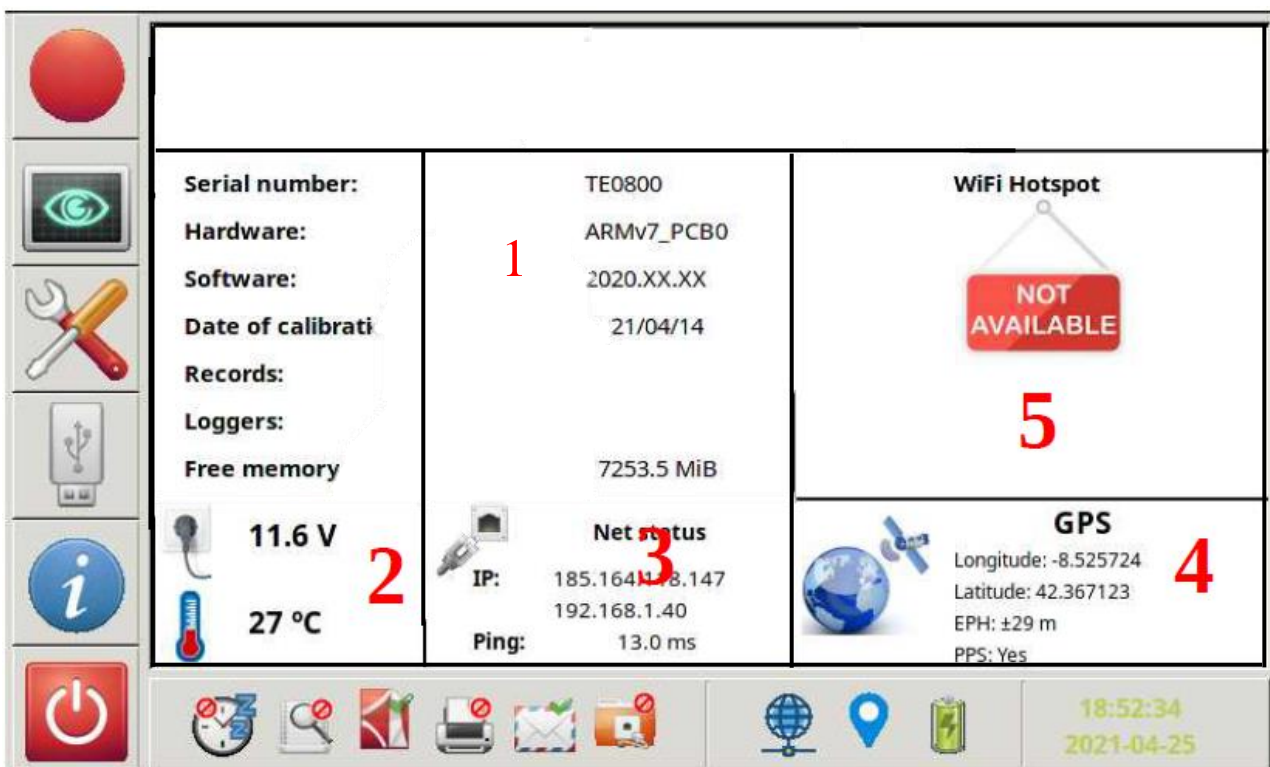
Transfer events to a USB drive.



To do this, click on the button  and follow the on-screen instructions.

IMPORTANT! If you want to format the USB stick on a PC, you must NOT use spaces in the volume label, otherwise the USB stick will not be recognized.

8.11 Device status and information



The status menu displays important information about the device.

1: The device information will be displayed here.

2: When the power adapter is plugged in, the voltage level will be displayed.

Operating temperature of the device (this value is different from the ambient temperature). The optimal value of this field is between -15°C and +65°C

3: Network Status

4: With the GPS module installed, the coordinates are displayed here

5: Set up a Wi-Fi hotspot

8.12 Energy saving

If the clock icon is selected in the lower left area of the screen, the energy saving options open.

The screenshot displays the energy saving configuration screen. It is divided into two main sections. The left section, titled "Time active:", contains two rows of time selection. The first row, "Active from:", has two dropdown menus showing "08" and "00" with a colon between them. The second row, "To:", has two dropdown menus showing "20" and "00" with a colon between them. A large red number "1" is placed between the two rows. The right section, titled "Equipment active on:", lists the days of the week with checkboxes: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday. All checkboxes are checked. A large red number "2" is placed to the right of the Wednesday and Thursday entries. Below these sections is a horizontal line, followed by a checkbox labeled "Use timer" which is currently unchecked. A large red number "3" is placed to the right of this checkbox. Below the "Use timer" checkbox is another horizontal line, followed by a green checkmark icon inside a square button.

The device can be set to be active/asleep depending on the time (1) and day (2).

The timer is only active if the check mark "use timer" (3) is set.

8.13 Alarm system

There is no external alarm system available for this device.

9 Web server

9.1 Introduction

The communication module activates an e-mail server, an FTP server, and a WEB server. If a 4G router or internal USB modem was purchased with the device, the router and device will work at the factory.

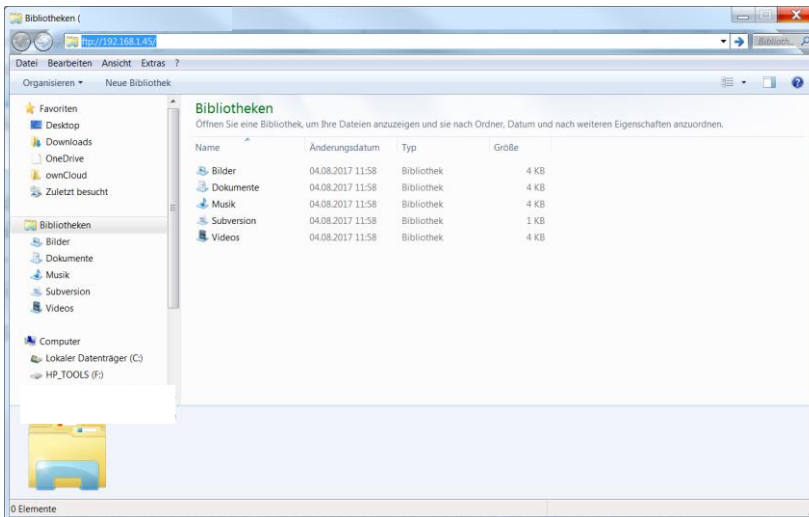
In order to connect to the device via the Internet, a public IP address must be obtained. Please check with your local ISP to enable this feature.

9.2 Connect to the WEB server

If the device is connected to an existing network via an Ethernet cable, the web server is running. The default connection is (Internet Explorer/Chrome/...) <http://192.168.1.45>.

9.3 Connect to the FTP server

Connect via an FTP program or Windows Explorer.



If the device is on the same physical network, enter `ftp://xxx.xxx.xxx.xxx` in the address bar. The device is set to `ftp://192.168.1.45` by default.

To log in, use the following standard parameters:

- User: **ftpuser**
- Password: **recorder**

9.4 Access to the WEB server

Simply enter the IP address without any other characters or add `http://` to connect to the web server.

Log in as an administrator or guest:

1. Administrator:
Manage the devices and change all the settings
Username: **admin** Password: **admin**
2. Guest:
A guest can only see the device status and recorded events.
No changes to the settings are allowed.
Username: **guest** Password: **guest**

Note: Usernames and passwords are case-sensitive. Please change the default passwords for your own security.

9.5 Home page

After logging in, the home screen appears.

Equipment status

Serial Number: ZV7025
Capture status: Equipment is not recording
Records stored: 50 Loggers files: 1
Memory free: 1.75 GB
Equipment is connected to the power supply DC Voltage: 13.3 V Equipment temperature: 46 °C (Working range: -15 °C to +80 °C) CPU temperature: 61 °C (Working range: 0 °C to +95 °C)
Date & Time: May-17-2018 15:03 (Note: the equipment timezone is: Europe/Berlin)
Date of calibration: May-07-2018

On the left side, the individual functions can be accessed.

In the middle are always the links to the homepage and the help page.

Equipment status

Serial Number: ZV7025
Capture status: Equipment is not recording
Records stored: 50 Loggers files: 1
Memory free: 1.75 GB
Equipment is connected to the power supply DC Voltage: 13.3 V Equipment temperature: 46 °C (Working range: -15 °C to +80 °C) CPU temperature: 61 °C (Working range: 0 °C to +95 °C)
Date & Time: May-17-2018 15:03 (Note: the equipment timezone is: Europe/Berlin)
Date of calibration: May-07-2018

Recording Status: Displays the recording mode

Logger files: a large number of stored logbook files

Free storage: free space available

9.6 View Configuration

Displays the current setup of the device

Menu:

- [Show configuration](#)
 - [Change configuration](#)
 - [Alarm configuration](#)
 - [Real time data](#)
 - [Recording control](#)
 - [Show data](#)
 - [Download data](#)
 - [Delete records](#)
 - [Security](#)
-

Equipment configuration

Record Time: 1 s

Notes:

Note 1: TEST

Note 2: www.zeb-maxam.com

Trigger levels:

Channel 1: 1.00 mm/s

Channel 2: 1.00 mm/s

Channel 3: 1.00 mm/s

Channel 4: 1.00

Channel 5: 1.00

Channel 6: 1.00

Mail alarms:

Mail to: zeb-service@zeb.maxam.net (Red Yellow Green

Mail to: (Red Yellow Green)

Mail to: (Red Yellow)

Red Level: 100.000

Yellow Level: 50.000

Green Level: 5.000

Power save mode is not active

9.7 Change configuration

Allows the administrator to change settings.

Record time:	2 seconds ▾
Pretrigger time:	60 <input type="text"/> milliseconds
Date format:	year/month/day ▾
Standard:	UNE 22381/93 ▾
Frequency calculation method:	FFT 50% Energy ▾
Note 1:	<input type="text"/>
Note 2:	<input type="text"/>
Note 3:	<input type="text"/>

Recording Time: Length of an event file

Notes: Free lines to enter information

Trigger Level: Trigger level in mm/s for each channel. The checkbox allows you to enable or disable a channel trigger.

In the lower part of the page, the power saving options can be changed.

Use timer

Timer active from : to :

Days active:

- Sunday
- Monday
- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday

Logger configuration:

- Logger to file
- Generate pdf report

FTP/SFTP configuration:

- Upload binary file to FTP/SFTP server
- Upload PDF file to FTP/SFTP server
- Upload CSV file to FTP/SFTP server
- Delete files from equipment after upload

Upload interval: minutes

Web services are not available during shutdown.

All changes must be confirmed by pressing "**Send Changes**".

9.8 *Configuring the alarm*

Email Addresses and Routing

Alarm system configuration

Define mail addresses

Mail 1 to:

Mail 2 to:

Mail 3 to:

Equipment status info

Send the equipment status information every **hours**

Send status to:

Mail 1

Mail 2

Mail 3

Up to three different e-mail recipients can be entered.

In the lower half of the screen, the alarm setup can be made.

Send alarm if value is over <input type="text" value="20.000"/> Send alarm if value is over <input type="text" value="10.000"/> Send alarm if value is over <input type="text" value="5.000"/>	<p>Three independent levels (red, yellow, green) can be set up.</p>
<p>Send Red alarm to: <input checked="" type="checkbox"/> Mail 1 <input checked="" type="checkbox"/> Mail 2 <input checked="" type="checkbox"/> Mail 3</p> <p>Send Yellow alarm to: <input checked="" type="checkbox"/> Mail 1 <input checked="" type="checkbox"/> Mail 2 <input type="checkbox"/> Mail 3</p> <p>Send Green alarm to: <input checked="" type="checkbox"/> Mail 1 <input type="checkbox"/> Mail 2 <input type="checkbox"/> Mail 3</p>	<p>The routing table allows the user to select which recipient should be notified of which event.</p>
<p>Select limit: <input type="text" value="05 - Limit to 1 alarm every 5 minutes"/> ▾</p> <p><input type="checkbox"/> Attach binary file</p> <p><input checked="" type="checkbox"/> Attach pdf file</p>	<p>To receive emails about a simple trigger event, select Limit "00 – Trigger Event Alert" or select a time limit for events.</p> <p>Alert emails can be attached to the event file in binary sis format or as a PDF</p>
<p style="text-align: center;"><input type="button" value="Submit changes"/></p>	<p>All changes must be confirmed by pressing the "Submit Changes" button</p>

The following table lists the allowed settings:

	Trigger Event	Fixed period	Event file as attachment
Undulation	allowed	allowed	Only at events
Gantt Chart Form	Not allowed	obligatory	Only after the recording is finished
Combined form	allowed	allowed	After the recording is finished and at each event


9.9 Real-time data

This page displays automatically updated values: Actual and Maximum. The maximum peak value resets at midnight.

Real time data		
Channel	Actual	Maximum
1	0.06 mm/s 24 Hz	5.52 mm/s 22 Hz
2	0.06 mm/s 205 Hz	0.08 mm/s 23 Hz
3	0.06 mm/s 512 Hz	0.06 mm/s 33 Hz
4	0.07 mm/s 1024 Hz	0.08 mm/s 341 Hz
5	0.06 mm/s 341 Hz	0.09 mm/s 35 Hz
6	0.05 mm/s 1024 Hz	0.08 mm/s 256 Hz
7	0.3 Pa 256 Hz	0.2 Pa 512 Hz
VSum 1	0.07 mm/s	5.52 mm/s
VSum 2	0.07 mm/s	0.10 mm/s
Time recording: 00:48:18 s		
<i>Return to VibraWEB interface</i>		

9.10 View data


Show records



Filtering:





Do not apply filter (all the records will be shown)

Apply filter (only the records of the selected date will be shown)






Click on the icon for apply / restore filter

View records and use filters when needed.

Events look like this:


55DB93E34002M.sis - Aug-25-2015 00:00:03    

Channel 1 (Vertical) : 2.31 mm/s (9 Hz)
Channel 2 (Longitude) : 0.06 mm/s (341 Hz)
Channel 3 (Transverse) : 0.06 mm/s (256 Hz)
Channel 4 (Vertical) : 0.06 mm/s (146 Hz)
Channel 5 (Longitude) : 0.06 mm/s (256 Hz)
Channel 6 (Transverse) : 0.06 mm/s (512 Hz)
Channel 7 (-) : 0.14 Pa (256 Hz)
Frequency calculation method: Zero crossing


55DC0C7604002.sis - Aug-25-2015 08:34:30    

Channel 1 (Vertical) : 2.30 mm/s (2 Hz)
Channel 2 (Longitude) : 0.05 mm/s (473 Hz)
Channel 3 (Transverse) : 0.05 mm/s (176 Hz)
Channel 4 (Vertical) : 0.06 mm/s (389 Hz)
Channel 5 (Longitude) : 0.06 mm/s (356 Hz)
Channel 6 (Transverse) : 0.06 mm/s (340 Hz)
Channel 7 (-) : 0.10 Pa (98 Hz)
Frequency calculation method: FFT Peak

 **Bargraph Event**

 **Wave-Form File**

 **Download as PDF**

 **Download as binary sis file**

9.11 Download data

Opens an FTP connection.

9.12 Deleting Records

You can use this page to delete records.

Delete records
(The equipment timezone is: Europe/Berlin)

25-08-2015 23:24:11



(Click on the calendar icon if you want to change date and time)

Select the delete condition:

Delete records for this date ▾

Delete records

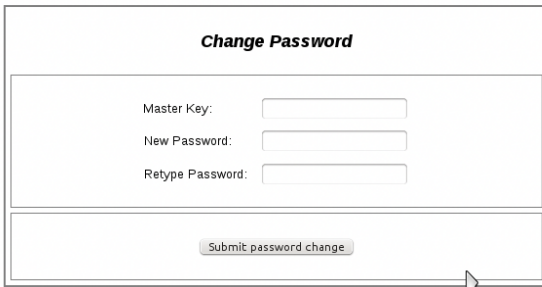
There are three modes:

- Delete records on this date
- Delete the records before this date and time
- Delete all records

Warning! Deleted records cannot be recovered!

9.13 Safety

VibraWEB - Security



The screenshot shows a web form titled "Change Password". It contains three input fields: "Master Key:", "New Password:", and "Retype Password:". Below the fields is a button labeled "Submit password change". A mouse cursor is pointing at the bottom right corner of the form.

Enter the passkey and new password with confirmation to change the current password.

Master Key: Combination of "VibraWEB" + "Serial Number". Example: Device number ZV7777.
The master key is **VibraWEBZV7777** (case sensitive).

Finally, click on the "Change Password" button.

10 Air transport

10.1 Automatic start

Not available.

10.2 Safety during air transport

The rechargeable lithium battery of this device can cause problems caused by an airline's restrictions.

In this case, remove the fuse. Simply open the screws and remove the default fuse.

WARNING. Never touch electronics. Prevent electrostatic discharge!

10.3 Reset equipment

If the device hangs or freezes, do the following:

Press and hold the lighting button (BULB) for about 8 seconds. The device is switched off. Restart it. It is launched and goes directly into the recording routine. Stop the repetition. Continue your regular operations. Please send us an e-mail with a short description of the error to zeb@maxam-corp.com.

11 Specifications

11.1 Overview

Depending on the specific device configuration, some values may not be relevant or may not exist.

Number of channels:	3 - 7
Sampling rate (samples per second):	2048
Analog-to-Digital Converter:	16 Bit
Internal Storage:	1800 MB
Band:	1 to 315 Hz
Event Length (max. 10000):	1- 32 seconds in 2n steps
Trigger Mode: (Automatic or Channel Independent)	Automatic / Manual / External
Shooting modes:	Waveform / Bar Chart / Combined
Interfaces:	LAN, USB Host, USB Guest
Visualization:	Display / Printer / WEB Server / FTP Server / Email / Vibration Meter Software
External power supply:	12 V
Internal Power Supply:	Li-ion battery for charging
Operating Time (All Functions On and Continuous Measuring):	24h
Show:	TFT (800x480)
Keyboard:	Touch panel + 8 buttons
Protection:	Protection class IP 54
Dimensions (mm):	220*180*70
Weight:	4.5 kg
Temperature range:	-15 to +45°C
Storage temperature range:	-20 to +60°C
Working and storage moisture:	Without condensation

11.3 1 - 315 Hz version:

Measuring range for seismic channels	± 120 mm/s
Seismic Channel Resolution	0.01 mm/s
Measuring range sound channel	± 502 Pa (148 dB)
Resolution of the sound channel	0.1 Pa
Minimum measurement for the sound channel	2 Pa (100 dB)
Frequency range for seismic channels	1 – 315 Hz
Frequency range for sound channels	2 - 250 Hz
Type: Seismic Transducers	Geophone fn = 4.5 Hz
Correction of the response of the transducers	IIR filter

The theoretical frequency response corresponds to this expression:

$$A_{Theoretical} = \frac{1}{\sqrt{\left[1 + \left(\frac{0,80 \cdot f_0}{f}\right)^4\right] \cdot \left[1 + \left(\frac{0,80 \cdot f}{f_1}\right)^4\right]}}$$

The following applies: f=frequency, f0 = 1 Hz, f1 = 315 Hz

Tolerances:

The maximum tolerances over the frequency response of the device are:

1 - 315 Hz version			
Frequency	0.5 – 1.25 Hz	1.25 - 252 Hz	252 - 630 Hz
Upper limit	20,00%	10,00%	20,00%
Lower bound	20,00%	10,00%	20,00%

Note: The deviation of the device plus the uncertainty in the calibration must be below these values.

11.4 Electrical Specifications

Power supply:	12V
Fuse:	2A
Internal Li-ion battery	8.4 V

The devices can also be equipped with customer-specific sensors:

- Hydrophones
- Accelerometers
- Alternative Geophones (2-250Hz)
- Other sensors

The technical specifications for other sensors are documented in separate data sheets.

NOTE:

This instruction manual was created in Q3/25.

For technical information on this or other ZEB products, please send an e-mail to zeb@maxam-corp.com or call us at +49 (0) 2365 5020900.