

User Manual

Wireless Reading Device PocketServer-3

Mess- und Ortungstechnik
Measuring and Locating Technologies

Elektrizitätsnetze
Power Networks



Kommunikationsnetze
Communication Networks



Rohrleitungsnetze
Water Networks



Abwassernetze
Sewer Systems



Leitungsortung
Line Locating



Consultation with SebaKMT

The present system manual has been designed as an operating guide and for reference. It is meant to answer your questions and solve your problems in as fast and easy a way as possible. Please start with referring to this manual should any trouble occur.

In doing so, make use of the table of contents and read the relevant paragraph with great attention. Furthermore, check all terminals and connections of the instruments involved.

Should any question remain unanswered or should you need the help of an authorized service station, please contact:

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1 Safety instructions

1.1 General safety instructions and warnings



- Do not drop the device / the system's components or subject it / them to strong impacts or mechanical shocks.
- The limits described under Technical Data may not be exceeded.
- The device / system must be in a technically perfect condition for measurement.

1.2 General notes

Safety precautions This manual contains basic instructions for the commissioning and operation of the device / system. For this reason, it is important to ensure that the manual is always available to the authorised and trained operator. He needs to read the manual thoroughly. The manufacturer is not liable for damage to material or humans due to non-observance of the instructions and safety advices provided by this manual.

Locally applying regulations have to be observed!

Labelling of safety instructions The following signal words and symbols are used in this manual and on the product itself:

Signal word / symbol	Description
CAUTION	Indicates a potential hazard which may result in moderate or minor injury if not avoided.
NOTICE	Indicates a potential hazard which may result in material damage if not avoided.
	Serves to highlight warnings and safety instructions. As a warning label on the product it is used to draw attention to potential hazards which have to be avoided by reading the manual.
	Serves to highlight important information and useful tips on the operation of the device/system. Failure to observe may lead to unusable measurement results.

Check contents Check the contents of the package for completeness and visible damage right after receipt. In the case of visible damage, the device must under no circumstances be taken into operation. If something is missing or damaged, please contact your local sales representative.

Working with products from SebaKMT It is important to observe the generally applicable regulations of the country in which the device will be operated, as well as the current national accident prevention regulations and internal company directives (work, operating and safety regulations).

Use genuine accessories to ensure system safety and reliable operation. The use of other parts is not permitted and invalidates the warranty.

Repair and maintenance Repair and maintenance work has to be carried out by SebaKMT or authorised service partners using original spare parts only. SebaKMT recommends having the system tested and maintained at a SebaKMT service centre once a year.

SebaKMT also offers its customers on-site service. Please contact your service centre if needed.

<i>Special transportation requirements</i>	The lithium batteries of the device are dangerous goods. The transport of the batteries themselves and of devices which contain such batteries is subject to regulations based on the UN Model Regulations "Transport of Dangerous Goods" (ST/SG/AC.10-1). Please inform yourself about the transportation requirements and follow them when shipping the device.
<i>Electromagnetic radiation</i>	This device is designed for industrial use. When used at home it could cause interference to other equipment, such as the radio or television. The interference level from the line complies with the limit curve B (living area), the radiation level complies with the limit curve A (industrial area) according to EN 55011. Given that living areas are sufficiently far away from the planned area of operation (industrial area), equipment in living areas will not be impaired.

1.3 FCC / ISED

For FCC:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and*
- (2) this device must accept any interference received, including interference that may cause undesired operation.*

No changes shall be made to the equipment without the manufacturer's permission as this may void the user's authority to operate the equipment.

This device complies with the safety requirements for RF exposure in accordance with FCC Part 15.1093 for portable use conditions.

For ISED:

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s).

Operation is subject to the following two conditions:

- (1) This device may not cause interference.*
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.*

This device complies with the safety requirements for RF exposure in accordance with RSS-102 Issue 5 for portable use conditions.

The highest reported SAR value is 0.15W/Kg.

Pour ISED:

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage.*
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.*

Cet appareil est conforme aux exigences de sécurité concernant l'exposition aux RF selon la norme RSS-102, 5ème édition, pour des conditions d'utilisation portable.

La valeur maximale de SAR rapportée est de 0.15W/Kg.

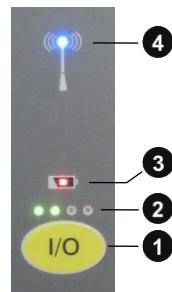
2 PS-3 - Basics

2.1 Technical data

The PocketServer is distinguished by the following technical parameters:

Parameter	Value
Communication	Short range radio 868 MHz (in Europe) 913.02 MHz (in the US) 913 / 916 MHz (depending on the country) WIFI Access-Point 2.4 GHz
Storage	Internal 8 GB Micro SD card (approx. 6.5 GB free for measured and device data)
Battery	Internal rechargeable battery pack (Li-Ion) 3.6 V, 4700 mAh
Charger	5V, 2A
Operating time	approx. 10 h
Charging time	approx. 5 h
Connectors	Micro USB connector for charger Mini USB connector for radio interface LOG RI+ USB connector for storage device
Operating temperature	-20 ... +60°C
Storage temperature	-25 ... +70°C
Dimensions	150 x 92 x 29 mm
Weight	280 g

2.2 Buttons and LEDs



① On/Off button

② Status LEDs

Displays in operation the battery status of the PocketServer.

③ Charging indicator light

Lights up during battery charging. Turns off when the battery is full.

④ Wireless LED

Lights when there is radio contact between the PocketServer and a device.

2.3 Connections



⑤ USB port

Connects to a USB data storage device.

⑥ Connection for the radio module LOG RI+

⑦ Connection for charger

2.4 Type plate



① Identification number (ID)

② Access to PocketServer WLAN

SSID: Name of WLAN

PW: Password for WLAN

③ Type designation

The last three digits correspond to the radio frequency of the device (here: 868 MHz).

2.5 Switching on/off

Switching on To switch on the PocketServer, briefly press the I/O button on the device. The blue and one green LED light up.

The device takes some time to start up the internal processor. During this time, the blue LED flashes at short intervals.

Do not interrupt the power-on procedure!

At the end of the process, the blue LED flashes three times at long intervals and then goes out.

The device is now ready for operation. The PocketServer WLAN network is established and available. The green LED bar indicates the battery status of the PocketServer.

Switching off There are two ways to turn off the PocketServer.

Option 1: in the user interface

► Tap these keys one after the other:



Option 2: with the I/O button on the PocketServer

► Press the I/O button on the unit for about two seconds. Release the button as soon as the green LEDs go out.

The device takes some time to shut down the internal processor. During this time, a single green LED is on.

Do not interrupt the power-off procedure!

Once the green LED goes out, the device is switched off.

2.6 User interface

Quick selection buttons Four quick selection buttons can be found in the corners of the user interface. Which of the following buttons are currently available depends on the active menu.



This button opens the start screen of the PocketServer.



This button opens the configurations of the PocketServer.



This button returns you to the previous screen.



This button refreshes the screen.



This button cancels the current operation.



This button opens the PocketServer help.



This button opens a list of frequently used options. The options that are available in the list depend on the active menu.

The start screen In the start screen, select the device type with the large buttons.



Tap this button, when you want to communicate with LOG N-3 noise-loggers.



Tap this button when you want to communicate with LOG P-3 or LOG P-3 mini pressure-loggers.



Tap this button when you want to communicate with LOG DX data-loggers or with TDM 200 devices.



Tap this button when you want to communicate with LOG D-3 data-loggers with SebaFlow devices or TDM 300 devices

Header/footer In the segment at the top of the screen, the currently open device type is shown.



In the segment on the bottom of the screen, current information on the status of the PocketServer is shown.



Upper line (from left to right):

Utilization of internal data storage; Name of the displayed menu or ID of the contacted device;
Battery level;

Bottom line:

Date and time of the PocketServer; Once a data transfer takes place, a bar here shows the progress of the procedure.

3 PS-3 – Commissioning

Here you can find information about what needs to be done after switching on the PocketServer in order to make the device ready for operation.

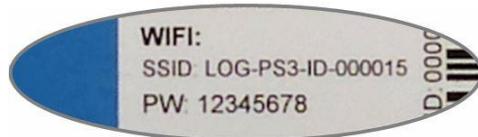
3.1 First connection

To connect the PocketServer to a smartphone or other mobile device for the first time, follow these steps:

First step: Create a WLAN connection

- ▶ Switch on PocketServer
- ▶ On your mobile device: activate WLAN
- ▶ Open list of available WLAN networks
- ▶ The PocketServer network is named **LOG-PS3-ID-*******

If this network is not in the list, it must be added. To this end, look for and open the option 'Add network' (or a similarly named setting) in the WLAN settings. Enter the 'SSID' of the PocketServer as network name and confirm. The SSID can be found on the type plate.

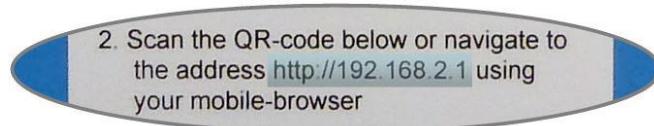


- ▶ Select the PocketServer network in the list.
- ▶ Login using the password **12345678**. You can also find the password (PW) on the type plate.

The mobile device is now logged into the WLAN network of the PocketServer. In the status bar of the mobile device, the WiFi symbol should now be visible.

Second step: Open URL

- ▶ Open Internet browser and open the following URL: **http://192.168.2.1**
- This URL can also be found on the type plate. Alternatively, you can scan the QR code on the type plate.



The user interface of the PocketServer is now displayed on the mobile device.

Third step: Create quick-start button You can create a quick-start button for the PocketServer on the start screen of your mobile device. This makes the PocketServer user interface easier to open next time.

- ▶ In the browser menu bar look for and open the option 'Add to start screen' (or a similarly named setting).

3.2 Starts after the first connection

After the first connection, access to the PocketServer WLAN is saved in your mobile device. The devices detect each other and automatically connect from then on.

- ▶ Switch the PocketServer on.
- ▶ Wait until the WiFi symbol  is shown in the status bar of the mobile device.
- ▶ Tap on the LOG PS-3 button in the start screen.

NOTE

As long as the mobile device is logged into the PocketServer's WLAN network, there is no reception for other mobile data, meaning the device does not receive and send any e-mails, messages or other data via the mobile network.

3.3 Selecting the language

You can change the operating language.

- ▶ Tap these buttons one after the other:



- ▶ Select your language and confirm with **OK**.

3.4 Setting the time zone

For correct functioning of the PocketServer, it is important that the device knows the region and the time zone in which it is located.

- ▶ Tap the button .
- ▶ Tap **Settings**.
- ▶ Tap **Region**.
- ▶ Select your region and time zone and confirm with **OK**.

3.5 Entering the license key

In the basic version, the PocketServer user interface provides functions for reading measured data. Additional functions (such as programming devices, correlation of data, etc.) can be activated after purchasing a license. The user receives a number code, the license key.

- ▶ In the start screen, tap the button .
- ▶ In the context menu, tap on **enter license-code**.
A dialogue window opens.
- ▶ Enter the license key and confirm with **OK**.

The new functions are now enabled. If they are not available in the user interface, refresh the screen with the button .

4 LOG N-3

Here you can find information about all functions that are available for working with **LOG N-3** sound loggers.

4.1 Managing loggers in PS-3

4.1.1 Logger group

To create, edit or delete logger groups in the PocketServer, proceed as follows:

- ▶ In the start screen, tap **LOG N-3**.
- ▶ Tap **Patrol mode** when you want to create or edit a Patrol group.

Tap **Lift&Shift** when you want to create or edit a Lift&Shift group.

The display area is divided in two. Under the **Function** section you will find the functions for creating logger groups. Under **Groups**, all created logger groups are listed.



Creating a group

- ▶ Tap **Create**.
A dialogue window opens.
 - ▶ Enter a name and a comment for the new group.
 - ▶ Tap **Create**.
The dialogue window closes.
- The newly created group now appears in the **Groups** list.

Deleting a group

- ▶ Tap the button .
- ▶ In the context menu, tap **Delete**.
- ▶ Select the desired group in the **Groups** list.
- ▶ Confirm the security prompt with **OK**.
The group disappears from the group list. All data of the group are deleted from the PocketServer.
- ▶ Tap the button .

Adding loggers to the group

- ▶ In the **Group** list, select the corresponding group.
- ▶ Tap **Edit group**.

The display area is divided in two. In the **Function** section you will find the functions for editing the group. In the **Devices** section, all loggers in this group are listed.

Option 1: Entry of the ID

- ▶ Tap **Add**.
A dialogue window opens.
- ▶ Enter the identification number (ID) of the logger.
- ▶ Tap **Add**.
The dialogue window closes. The newly created logger now appears in the device list.

Option 2: Automatic detection

- ▶ Tap **Auto-Detection**.
A dialogue window opens. You can enter a comment on the logger or allow automatic creation of a comment.
- ▶ Tap **Start**.
- ▶ Switch the logger on.
The ID of the device is recognised by the PocketServer. The logger now appears in the device list.
- ▶ Tap **Stop auto-detection**.

Deleting loggers from the group

- ▶ Tap the button .
- ▶ In the context menu, tap **Delete**.
- ▶ Select the desired logger in the **Devices** list.
- ▶ Confirm the security prompt with **OK**.
The logger disappears from the device list. All data of the logger are deleted from the PocketServer.
- ▶ Tap the button .

4.1.2 Single loggers

To create or edit single loggers in the PocketServer, proceed as follows:

- ▶ In the start screen, tap **LOG N-3**.
- ▶ Tap **Single device**.

The display area is divided in two. In the **Function** section you will find the functions for creating loggers. In the **Devices** section, all created loggers are listed with ID and comment.



Creating loggers **Option 1: Entry of the ID**

- ▶ Tap **Create**.
A dialogue window opens.
- ▶ Enter the identification number (ID) of the new logger. You can also enter a comment on the device.
- ▶ Tap **Create**.
The dialogue window closes. The newly created logger now appears in the **Devices** list.

Option 2: Automatic detection

- ▶ Tap **Auto-Detection**.
- ▶ Switch the logger on.
The ID of the logger is recognised by the PocketServer. The logger now appears in the **Devices** list.
- ▶ Tap **Stop auto-detection**.

Deleting loggers

- ▶ Tap the button .
- ▶ In the context menu, tap **Delete**.
- ▶ Select the desired logger from the **Devices** list.
- ▶ Answer the confirmation prompt with **OK**.
The logger disappears from the device list. All data of the logger are deleted from the PocketServer.
- ▶ Tap the button .

4.2 Reading the measured data

4.2.1 Patrol

Requirement:

It is recommended that you connect the optional external wireless module **LOG RI+** to the PocketServer because the limited range of the internal wireless module only allows a limited patrol.

Procedure:

- ▶ In the start screen, tap **LOG N-3**.
- ▶ Tap **Patrol mode**.
- ▶ Select the desired logger group in the **Groups** list.
- ▶ Tap **Start Patrol mode**.

The patrol begins. The radio LED on the LOG RI+ or on the PocketServer lights up. The PocketServer searches for loggers of the group within radio range. Once a logger is detected, its data is received and stored. The screen shows which loggers have already been received and which have not.

With the **Stop Patrol mode** button, you can stop the patrol at any time. Otherwise, the patrol process continues until all the loggers in the group have been recognized and received. A success message appears on the screen. The radio module is deactivated. The radio LED goes off.

The received measurement data can be found as a data record in the **Data** list. It can be accessed and displayed there.

4.2.2 Reading out a Lift&Shift group

Requirement:

- The loggers must not have been switched off since the measurement.

Procedure:

- ▶ In the start screen, tap **LOG N-3**.
- ▶ Tap **Lift&Shift**.
- ▶ Select the desired logger group in the **Groups** list.
- ▶ Tap **Read group**.

The measurement data is read. The progress of the operation is shown on the screen. At the end, a message informs you which loggers of the group were read out successfully and which were not. If necessary, repeat the procedure.



All loggers must be in wireless range. The ideal distance is approximately 2 m between PocketServer and loggers.

The received measurement data can be found as a data record in the **Data** list. It can be accessed and displayed there.

4.2.3 Reading out single loggers

To read out measured data from an individual logger, proceed as follows:

- ▶ In the start screen, tap **LOG N-3**.
- ▶ Tap **Single device**.
- ▶ Select the desired logger from the **Devices** list.
- ▶ Tap **Measurement data**.

The connection to the logger is established. The data is received by the PocketServer and displayed on the screen.

After closing the measurement data display, you will find this data record in the **Data** list. It can be accessed and displayed there at any time.

4.3 Displaying measurement data

All read measured data is stored in the PocketServer and can be accessed and displayed at any time.

4.3.1 Data of a Patrol group

To access the measured data of a Patrol group, proceed as follows:

- ▶ In the start screen, tap **LOG N-3**.
- ▶ Tap **Patrol mode**.
- ▶ Select the desired logger group in the **Groups** list.
- ▶ Select the desired measured data from the **Data** list.

On the screen, the **Session** area opens.

Logger		ESA
ID000134		11
ID000135		36
ID000133		39

On the left, all loggers are listed using their ID.

In the middle, a coloured symbol indicates whether the logger is in the alarm state.

GREEN ... no alarm.

RED ... alarm! Leak threshold exceeded

On the right, you will find the minimum ESA value of the respective logger.

Displaying the minimum values When you tap the coloured icon next to a logger ID, an additional line is shown/hidden.

↓

ID000133		39
Level	Frequency	Threshold
33db	60Hz	20db

In this line you will find:

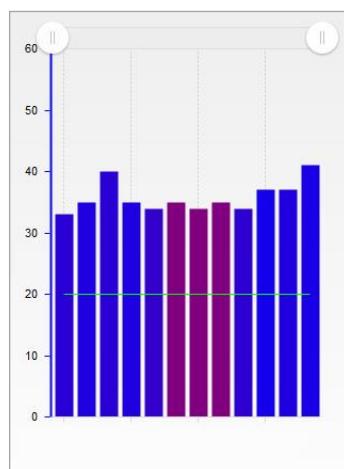
- Level and frequency of the leak noise of this logger

- The set alarm threshold of this logger

Displaying measurements If you tap the ID of a logger in the alarm state, the complete measurements of this logger are accessed.



The measured data display opens.



X-axis ... course of measurement over time
Y-axis ... level in dB

Each bar represents a single measurement.
The height of the bar represents the measured level.
The colour of the bar represents the measured frequency.

0 Hz 3300 Hz

The horizontal green line represents the set alarm threshold.

Editing the displays Zoom

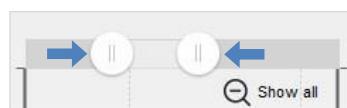
You can narrow the chart view to any time range.

Option 1:

- Touch a point on the diagram and slide your finger to the side to highlight the desired area.

Option 2:

- Slide the two control elements to the left/right at the top of the diagram.



Reset:

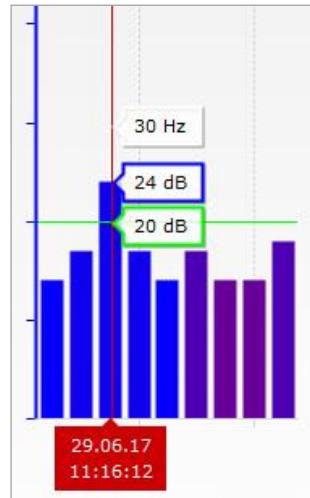
- Tap **Show all** to reset the view.

Individual values

For each individual measurement in the diagram, you can find the measured **level (dB)**, the **frequency (Hz)** and the exact **time of the measurement**.

- Touch the desired bar in the diagram.

A vertical red line appears (cursor). The values can be read on this line.



The green highlighted box indicates the alarm threshold (here: 20 dB).

Legend

You can view additional information about the diagram view.

- Tap the button .

- In the context menu, tap **Legend**.

Above the diagram, the **Info** area opens. It provides, along with other information, a colour scale for easier classification of the frequency values.

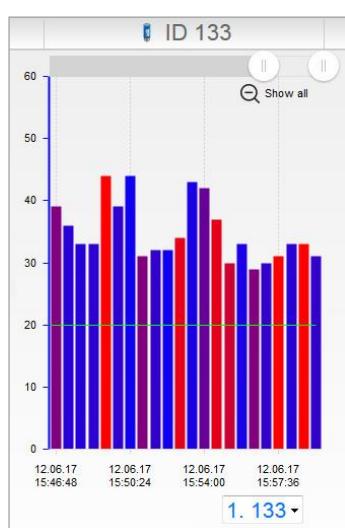
To close the area again, repeat the two steps.

4.3.2 Data of a Lift&Shift group

To access the measured data of a Lift&Shift group, proceed as follows:

- In the start screen, tap **LOG N-3**.
- Tap **Lift&Shift**.
- Select the desired logger group in the **Groups** list.
- Select the desired measured data from the **Data** list.

The measured data display opens. The measured values of the first logger of the group are displayed in a diagram.



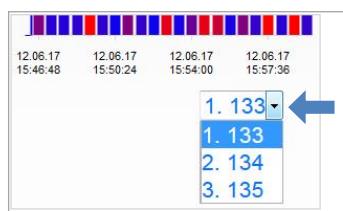
X-axis ... course of measurement over time
Y-axis ... level in dB

Each bar represents a single measurement.
The height of the bar represents the level.
The colour of the bar represents the frequency.
0 Hz 3300 Hz

The horizontal green line represents the set alarm threshold.

Changing loggers Below the diagram, there is a drop-down list. It contains all loggers, listed using their ID.

- To open the measured data of a logger, tap on the desired logger in the list.



Zoom You can narrow the chart view to any time range.

Option 1:

- Touch a point on the diagram and slide your finger to the side to highlight the desired area.

Option 2:

- Slide the two control elements to the left/right at the top of the diagram.

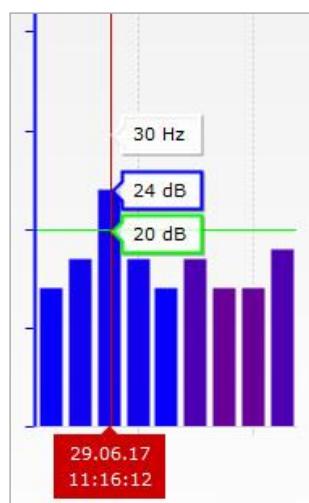
**Reset:**

- Tap **Show all** to reset the view.

Individual values For each individual measurement in the diagram, you can find the measured **level (dB)**, the **frequency (Hz)** and the exact **time of the measurement**.

- Touch the desired bar in the diagram.

A vertical red line appears (cursor). The values can be read on this line.



The green highlighted box indicates the alarm threshold (here: 20 dB).

Legend You can view additional information about the diagram view.

- Tap the button .

- In the context menu, tap **Legend**.

Above the diagram, the **Info** area opens. It provides, along with other information, a colour scale for easier classification of the frequency values.

To close the area again, repeat the two steps.

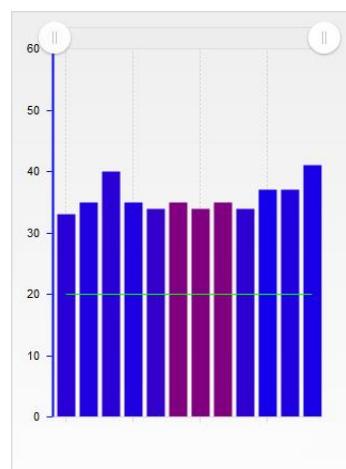
4.3.3 Data of an individual logger

All measured data that has been read and stored from a logger is available in the PocketServer under the ID of this logger. It does not matter whether the data was requested by patrolling or by Lift&Shift.

To access a measurement record of a logger, proceed as follows:

- ▶ In the start screen, tap **LOG N-3**.
- ▶ Tap **Single device**.
- ▶ Select the desired logger from the **Devices** list.
- ▶ Select the desired measured data from the **Data** list.

The measured data display opens.



X-axis ... course of measurement over time
Y-axis ... level in dB

Each bar represents a single measurement.
The height of the bar represents the measured level.
The colour of the bar represents the measured frequency.
0 Hz  3300 Hz

The horizontal green line represents the set alarm threshold.

Zoom You can narrow the chart view to any time range.

Option 1:

- ▶ Touch a point on the diagram and slide your finger to the side to highlight the desired area.

Option 2:

- ▶ Slide the two control elements to the left/right at the top of the diagram.



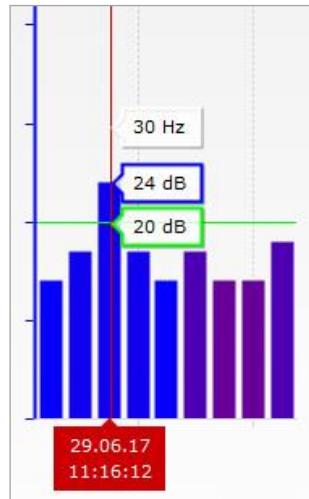
Reset:

- ▶ Tap **Show all** to reset the view.

Individual values For each individual measurement in the diagram, you can find the measured **level (dB)**, the **frequency (Hz)** and the exact **time of the measurement**.

- Touch the desired bar in the diagram.

A vertical red line appears (cursor). The values can be read on this line.



The green highlighted box indicates the alarm threshold (here: 20 dB).

Legend You can view additional information about the diagram view.

- Tap the button .

- In the context menu, tap **Legend**.

Above the diagram, the **Info** area opens. It provides, along with other information, a colour scale for easier classification of the frequency values.

To close the area again, repeat the two steps.

4.4 Reading out audio files

If you want to listen to the sound of a logger, you must read out the audio file of this noise from this logger.

Requirement:

- The corresponding logger must not have been switched off since the measurement.

Procedure:

- ▶ In the start screen, tap **LOG N-3**.
- ▶ Tap **Single device**.
- ▶ Select the desired logger from the **Devices** list.
- ▶ Tap **Audio**.

The connection to the logger is established. The audio file of the last measurement is received by the PocketServer. The following operating panel appears on the screen:



- ▶ Tap the play button  if you want to listen the leak noise.

The 3-second recording is played by your mobile device. Use the slider beside the speaker icon  to adjust the volume of the playback.

After leaving the audio menu, you will find this audio record in the **Data** list. It can be accessed there and the leak noise played back again at any time.



Using Microsoft Internet Explorer may cause problems with playing the audio files. In this case, please open the PocketServer user interface in another browser.

4.5 Reading out a configuration

You can read out the current configuration of a logger. The measurement and wireless settings and the general status information of this logger are queried.

- ▶ In the start screen, tap **LOG N-3**.
- ▶ Tap **Single device**.
- ▶ Select the desired logger from the **Devices** list.
- ▶ Tap **Settings**.

The connection to the logger is established. The data is received from the PocketServer.

On the screen, you will find the data in these drop-down menus:

Device info

- **Firmware**
Currently used firmware version of the logger
- **Battery**
Battery level (full/good/OK/poor) and battery voltage of the logger
- **Time**
Internal date and time of the logger (at the readout time)

Measurement settings

- **Operation mode**
Displays the mode of the logger (Patrol/Lift&Shift/Network/configuration mode)
- **Measurement ON**
Start time of the measurement
- **Measurement OFF**
End of the measurement
- **Values per measurement**
Number of measurements per measurement day
- **Leak threshold**
Level that is set as alarm threshold
- **Measurement days**
Days of the week on which measurements take place
- **Radio ON**
Time starting from which the logger is available by radio (internal wireless module is activated)
- **Radio OFF**
Time starting from which the logger is no longer available by radio (internal wireless module is deactivated)
- **Radio days**
Days of the week on which the logger is available by radio (within the Radio ON/OFF time)
- **Transmission interval**
Transmission interval of the logger (only for loggers in Patrol mode)

4.6 Programming



The function 'Programming devices' does not belong to the PocketServer basic equipment. It is only available after acquisition and input of a license key in the device.

4.6.1 Logger groups

To program a logger group, proceed as follows:

- ▶ In the start screen, tap **LOG N-3**.
- ▶ Tap **Patrol mode** when you want to program a Patrol group.
Tap **Lift&Shift** when you want to program a Lift&Shift group.
- ▶ Select the desired logger group in the **Groups** list.
- ▶ Tap **Program group**.
- ▶ Open the **Measurement settings** drop-down menu and enter the desired parameters.

Parameters

- **Operation mode**
The mode (Patrol/Lift&Shift) is preset.
- **Measurement ON**
Select when the measurement will start.
- **Measurement OFF**
Select when the measurement will end.
- **Values per measurement**
Select how many measurements per measurement day will be recorded by each logger.
- **Leak threshold**
Select the level that will be the alarm threshold.
- **Measurement days**
Specify the days of the week on which measurements will take place.
- **Radio ON**
Select the time from which the logger will be available by radio (internal wireless module is activated).
- **Radio OFF**
Select the time from which the logger will no longer be available by radio (internal wireless module is deactivated).
- **Radio days**
Specify the days of the week the logger is available via radio.
- **Transmission interval**
If the Patrol mode is set, select the transmission interval of the logger here.

INFO

For detailed explanations of the individual settings, refer to the operating instructions of the LOG N-3 system.

- ▶ Tap **Send** to program the logger group now, or tap **Store** if you want to program the loggers at a later time.

For **Send**, the configuration of the PocketServer is transmitted to all loggers of the group and applied there. At the end of the operation, it is displayed which loggers could be successfully programmed and which could not. If necessary, repeat the procedure.

INFO

All loggers must be switched on and in wireless range. The ideal distance is approximately 2 m between PocketServer and loggers.

4.6.2 Single loggers

To program individual loggers, proceed as follows:

- ▶ In the start screen, tap **LOG N-3**.
- ▶ Tap **Single device**.
- ▶ Select the desired logger from the **Devices** list.
- ▶ Tap **Program**.
- ▶ Open the **Measurement settings** drop-down menu and enter the desired parameters.

Parameters

- **Operation mode**
Select the mode (Patrol/Lift&Shift) for the logger.
- **Measurement ON**
Select when the measurement will start.
- **Measurement OFF**
Select when the measurement will end.
- **Values per measurement**
Select how many measurements per measurement day will be recorded.
- **Leak threshold**
Select the level that will be the alarm threshold.
- **Measurement days**
Specify the days of the week on which measurements will take place.
- **Radio ON**
Select the time from which the logger will be available by radio (internal wireless module is activated).
- **Radio OFF**
Select the time from which the logger will no longer be available by radio (internal wireless module is deactivated).

- **Radio days**

Specify the days of the week the logger is available via radio.

- **Transmission interval**

If the Patrol mode is set, select the transmission interval of the logger here.



For detailed explanations of the individual settings, refer to the operating instructions of the LOG N-3 system.

- Tap on the **Send** button at the bottom of the input mask.

The configuration is sent from the PocketServer to the logger and applied there. A success message appears at the end of the operation.

4.7 Export data

You can connect a USB data store to the PocketServer and copy data from loggers and logger groups to it. From the USB stick, the data can then be imported to the Seba DataView-3 software.

All data from all loggers To transfer all data of all N-3 loggers from PocketServer to the USB stick, proceed as follows:

- Connect the USB stick to the USB socket of the PocketServer.
- In the PocketServer start screen, tap **LOG N-3**.
- Tap **Single device**.
- Tap the button
- In the context menu, tap **Export**.

All data saved in the PocketServer for N-3 loggers (measured data, configuration data, event lists, etc.) is copied to the USB stick. A success message appears at the end of the operation.

All data from a logger group To transfer all data of a logger group from the PocketServer to the USB stick, proceed as follows:

- Connect the USB stick to the USB socket of the PocketServer.
- In the PocketServer start screen, tap **LOG N-3**.
- Tap **Patrol mode** when you want to transfer the data of a Patrol group.
Tap **Lift&Shift** when you want to transfer the data of a Lift&Shift group.
- Select the desired logger group in the **Groups** list.
- Tap the button
- In the context menu, tap **Export**.

All data saved in the PocketServer for this logger group (measured data, configuration data, event lists, etc.) is copied to the USB stick. A success message appears at the end of the operation.

All data of an individual logger To transfer all data of an individual logger from PocketServer to the USB stick, proceed as follows:

- Connect the USB stick to the USB socket of the PocketServer.

- In the PocketServer start screen, tap **LOG N-3**.

- Tap **Single device**.

- Select the desired logger from the **Devices** list.

- Tap the button .

- In the context menu, tap **Export**.

All data saved in the PocketServer for this logger (measured data, configuration data, event lists, etc.) is copied to the USB stick. A success message appears at the end of the operation.

A measurement record of a group To transfer a specific measurement record of a logger group from the PocketServer to the USB stick, proceed as follows:

- Connect the USB stick to the USB socket of the PocketServer.

- In the PocketServer start screen, tap **LOG N-3**.

- Tap **Patrol mode** when you want to transfer the data of a Patrol group.

Tap **Lift&Shift** when you want to transfer the data of a Lift&Shift group.

- Select the desired group in the **Groups** list.

- Select the desired data record from the **Data** list.

- Tap the button .

- In the context menu, tap **Export**.

The data record is copied to the USB stick. A success message appears at the end of the operation.

A measurement record of a logger To transfer a specific measurement record of an individual logger from the PocketServer to the USB stick, proceed as follows:

- Connect the USB stick to the USB socket of the PocketServer.

- In the PocketServer start screen, tap **LOG N-3**.

- Tap **Single device**.

- Select the desired logger from the **Devices** list.

- Select the desired data record from the **Data** list.

- Tap the button .

- In the context menu, tap **Export**.

The data record is copied to the USB stick. A success message appears at the end of the operation.

Safely removing the USB device To safely remove the USB stick from the PocketServer, follow these steps:

- Tap the button .

- Tap **USB**.

- Tap **Remove USB device**.

You can now remove the USB stick.

4.8 Real-time measurements

You can perform a real-time measurement with a single logger. The measured values are displayed 'live' on the screen.



NOTE

The real-time measurement requires a great deal of energy and considerably reduces the battery life of the logger. Only use the real-time measurement for as long as necessary.

Requirements:

- The relevant logger must be installed at the desired measurement point.
- The logger must be switched on and ready for wireless operation.
- You must know the ID of the logger and the logger must have been added to the PocketServer.

Procedure:

- ▶ In the PocketServer start screen, tap **LOG N-3**.
- ▶ Tap **Single device**.
- ▶ Select the desired logger from the **Devices** list.
- ▶ Tap **Realtime**.

The connection to the logger is established. The logger starts to measure. The recorded values are received in real time by the PocketServer and displayed in a diagram.

Stopping/resuming a measurement

- ▶ Tap the Stop button 

The logger stops recording and transmitting data to the PocketServer. The diagram view freezes. A dialogue window opens. Decide here whether you want to save the data from this measurement to the PocketServer.

- ▶ Tap the Play button 

Editing a diagram

With the checkbox **Val.**, a small table can be shown/hidden. The level and frequency of the last recording are displayed there. You can touch and drag this table on the screen.

You can narrow the time range (zoom function). To do so, mark the desired area in the diagram with your finger or move the two controls at the top in the diagram. Tap 'Show all' to reset.

You can display the values of each individual recording. Touch the desired bar in the diagram. A vertical red line appears. The level, frequency and time of the recording can be read off there.

(These functions are also explained in the section **Displaying measurement data**.)

Changing the number of displayed values

In the system settings of the PocketServer, you can specify how many values will be displayed in the diagram.

- ▶ If a real-time measurement is running, interrupt it with the Stop button .
- ▶ Tap the  button to go to the system settings.
- ▶ Tap **Settings**.

- ▶ Tap **Realtime view**.
- ▶ Select the desired option from the drop-down list.

Example: If you select the option **Show all**, each new recording will be added to the diagram. All values of the running real-time measurement can be seen in the diagram.

If you select the option **10 values**, only the last 10 recordings are displayed in the diagram. When each new recording is added, the oldest recording disappears from the view.
- ▶ Confirm with **OK**.
- ▶ With the  button, you can return to the real-time measurement. The connection between PocketServer and the device is immediately re-established and the real-time measurement is restarted.

4.9 GPS position

You can determine and store the GPS data for the location of a logger.

Requirements:

- Your mobile device (smartphone or tablet etc.) must be GPS-capable.
- The GPS function of your mobile device must be activated ('location services activated').

Procedure:

- ▶ Go to the installation location of the logger with your mobile device.
- ▶ In the PocketServer start screen, tap **LOG N-3**.
- ▶ Tap **Single device**.
- ▶ Select the desired logger from the **Devices** list.
- ▶ Tap the button .
- ▶ In the context menu, tap **GPS**.

The GPS coordinates of the mobile device are determined and displayed in a dialogue window. This may take some time. Tap **OK** to confirm and to save the displayed data in the PocketServer for the respective logger.

If no coordinates can be determined, an error message appears.

4.10 Firmware update

SebaKMT provides regularly updated versions of the firmware at www.sebakmt.com for all devices. Check and update regularly the firmware of your devices.

Identifying the firmware version In order to determine which firmware version is currently installed on a N-3 logger, read out its configuration.

- ▶ In the PocketServer start screen, tap **Log N-3**
- ▶ Tap **Single device**.
- ▶ Select the logger from the **Devices** list.
- ▶ Tap **Settings**.

The connection to the logger is established. The configuration of the device will be read out.

The firmware version is shown in the **Device info** drop-down menu.

Downloading update files The following is needed:

- Computer with USB interface and internet access
- A USB stick

Procedure:

- ▶ Visit www.sebakmt.com and search for the current firmware for **LOG N-3** loggers.
- ▶ Download the firmware to the computer. If it is a packed directory with the extension **.zip**, unpack it. The name of the firmware file ends with **.In3**
- ▶ Connect the USB stick to the computer.
- ▶ Copy the unpacked firmware file to the main directory of the USB stick.
- ▶ Remove the USB stick from the computer ('Safely remove hardware').

Performing an update

- ▶ Connect the USB stick to the PocketServer.
- ▶ In the PocketServer user interface, tap the  button.

▶ Tap **Update**.

▶ Tap **LOG N-3**.

A window opens with two drop-down lists.

- ▶ In the first list, select the firmware file.
- ▶ In the second list, select the device to be updated.

▶ Tap **Install**.

The update starts.



NOTE

Do not interrupt the process. Do not make any entries until the update is complete.

The connection between PocketServer and device is established. The wireless LED of the PocketServer lights up blue. The firmware data is transmitted. Progress of the procedure is displayed on the screen.

If an error occurs (error message), the process must be restarted. After successful data transfer, the new firmware is installed on the device. The device is then restarted.

The firmware update is now complete.

If you read out the configuration of the device, under **Device info**, the new firmware version is displayed.

Safely removing the USB device To safely remove the USB stick from the PocketServer, follow these steps:

► Tap the button .

► Tap **USB**.

► Tap **Remove USB device**.

You can now remove the USB stick.

5 LOG P-3 / P-3 mini

Here you can find information about all functions that are available for working with **LOG P-3** and **LOG P-3 mini** pressure loggers.

5.1 Managing loggers in PS-3

To create, edit or delete loggers in the PocketServer, proceed as follows:

- In the start screen, tap **LOG P-3/LOG P-3-mini**.

The menu of the same name opens.

Display area The display area is divided in two. Under the **Function** section you will find the functions for creating loggers. In the **Devices** section, all created loggers are listed with ID and comment.



Creating loggers Option 1: Entry of the ID

- Tap **Create**.
A dialogue window opens.
- Enter the identification number (ID) of the new logger.
- Confirm with **Create**.
The dialogue window closes. The newly created logger now appears in the **Devices** list.

Option 2: Automatic detection

- Tap **Auto-Detection**.
- Switch the logger on.
The ID of the logger is recognised by the PocketServer. The logger now appears in the **Devices** list.
- Tap **Stop auto-detection**.

Deleting loggers

- ▶ Tap the button .
- ▶ In the context menu, tap **Delete**.
- ▶ Select the desired logger from the **Devices** list.
- ▶ Answer the confirmation prompt with **OK**.
The logger disappears from the device list. All data of the logger are deleted from the PocketServer.
- ▶ Tap the button .

5.2 Reading the measured data

To read out the measured data, proceed as follows:

- ▶ In the start screen, tap **LOG P-3/LOG P-3-mini**.
- ▶ Select the desired logger from the **Devices** list.
- ▶ Tap **Measurement data**.
- ▶ Decide whether **All data** or **New data only** will be read out.

‘New data only’ means: Only the measurement data that has been recorded since the last reading is read out.

‘All data’ means: All measured data saved in the logger is read out.

The connection to the logger is established. The data is received by the PocketServer and displayed on the screen.

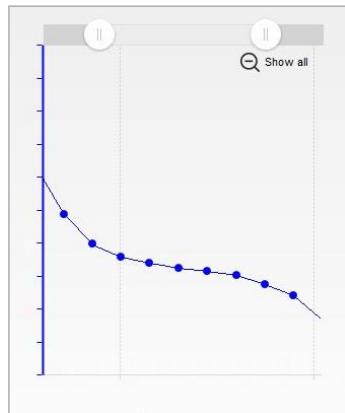
After closing the measurement data display, you will find this data record as a new entry under **Data**. It can be accessed and displayed there at any time.

5.3 Displaying measurement data

Read-out measured data is saved in the PocketServer. To access a measurement record, proceed as follows:

- ▶ In the start screen, tap **LOG P-3/LOG P-3-mini**.
- ▶ Select the desired logger from the **Devices** list.
- ▶ Select the desired measured data from the **Data** list.

The measurement data display opens. The graph of the measurement is displayed as a curve. Each point on the curve corresponds to a measured value.



X-axis ... course of measurement over time

Y-axis ... measurements

Zoom

You can narrow the chart view to any time range.

Option 1:

- Touch a point on the diagram and slide your finger to the side to highlight the desired area.

Option 2:

- Slide the two control elements to the left/right at the top of the diagram.



Reset:

- Tap **Show all** to reset the view.

Individual values

For each individual measurement in the diagram, you can find the **measured value** and the exact **time of the measurement**.

- Touch the desired point on the curve.

A vertical red line appears (cursor). The time of the individual measurement is displayed at the base of the line. At the intersection with the curve, the measured value that was determined during this measurement can be read.



Metadata

You can display additional information about this data record.

- ▶ Tap the button .
 - ▶ In the context menu, tap **File info**.
- Above the diagram, a new area opens in which the data are listed.
- ▶ To hide, tap again on  button and then on **Hide info**.

5.4 Reading out a configuration

You can read out the current configuration of a logger. The measurement and wireless settings and the general status information of this logger are queried.

- ▶ In the start screen, tap **LOG P-3/LOG P-3-mini**.
- ▶ Select the desired logger from the **Devices** list.
- ▶ Tap **Settings**.

The connection to the logger is established. The data is received from the PocketServer.

On the screen, you will find the data in these drop-down menus:

Device info

- **Firmware**
Currently used firmware version of the logger
- **Battery**
Battery level (full/good/OK/poor) and battery voltage of the logger
- **Time**
Internal date and time of the logger (at the readout time)
- **Storage**
Indicates whether or not the data storage of the device operates as a 'ring storage'.
- **Comments**
Displays the comment text that is stored for the logger.

Measurement settings

- **Interval**
Measurement interval
- **Pressure shocks**
Displays whether pressure shocks are recorded (checkbox is activated) or not (checkbox is deactivated).
- **Unit**
Unit of measure
- **End of measurement**
Displays whether an end time has been set for the measurement (checkbox is activated) or not (checkbox is deactivated).

5.5 Reading out pressure shocks

When reading the measured data, the pressure shock recordings are not transferred. These records must be requested by the logger separately.

- In the start screen, tap **LOG P-3/LOG P-3-mini**.
- Select the desired logger from the **Devices** list.
- Tap **Pressure shocks**.

The connection to the logger is established. The data is received by the PocketServer and displayed on the screen.

In the diagram, the 60-second recording is shown as a curve. In the field below the diagram, the date and time of the pressure shock are shown.



- Tap this field to open a list of all pressure shock recordings.
(If no list appears, no further recordings are present.)
- In the list, tap on the date of a pressure shock to open it in the diagram.
After closing the pressure shock display, you will find this data record as a new entry under **Data**. It can be accessed and displayed there at any time.

5.6

Real-time measurements

You can perform a real-time measurement with the logger. The measured values are displayed 'live' on the screen.



NOTE
The real-time measurement requires a great deal of energy and considerably reduces the battery life of the logger. Only use the real-time measurement for as long as necessary.

- In the PocketServer start screen, tap **LOG P-3/LOG P-3-mini**.

- Select the desired logger from the **Devices** list.

- Tap **Realtime**.

The connection to the logger is established. The logger starts to measure. The recorded values are received in real time by the PocketServer and displayed in a diagram as a curve.

Stopping/resuming a measurement

- Tap the Stop button  in the top left to stop the current measurement.

The logger stops recording and transmitting data to the PocketServer. The diagram view freezes. A dialogue window opens. Decide here whether you want to save the data from this measurement to the PocketServer.

- Tap the Play button  in the top left to resume the stopped measurement.

Editing the diagram With the checkbox **Val.**, a small table can be shown/hidden. This contains the current measurement interval and the last measured value. You can touch and drag this table on the screen.

You can narrow the time range (zoom function). To do so, mark the desired area in the diagram with your finger or move the two controls at the top in the diagram. Tap 'Show all' to reset.

You can display the value of each individual recording. To do so, touch the desired point on the curve. A vertical red line appears. The value and time of the recording can be read off there.

(These functions are also explained in the section **Displaying measurement data**.)

Changing the number of displayed values In the system settings of the PocketServer, you can specify how many values will be displayed in the diagram.

- If a real-time measurement is running, interrupt it with the Stop button .

- Tap the  button to go to the system settings.

- Tap **Settings**.

- Tap **Realtime view**.

- Select the desired number from the drop-down list.

Example: If you select the option **Show all**, each new recording will be added to the diagram. All values of the running real-time measurement can be seen in the diagram.

If you select the option **10 values**, only the last 10 recordings are displayed in the diagram. When each new recording is added, the oldest recording disappears from the view.

- Confirm with **OK**.

- With the  button, you can return to the real-time measurement. The connection between PocketServer and the device is immediately re-established and the real-time measurement is restarted.

5.7 GPS position

You can determine and store the GPS data for the location of a logger.

Requirements:

- Your mobile device (smartphone or tablet etc.) must be GPS-capable.
- The GPS function of your mobile device must be activated (location services activated).

Procedure:

- ▶ Go to the installation location of the logger with your mobile device.
- ▶ In the PocketServer start screen, tap **LOG P-3/LOG P-3-mini**.
- ▶ Select the desired logger from the **Devices** list.

- ▶ Tap the button .

- ▶ In the context menu, tap **GPS**.

The GPS coordinates of the mobile device are determined and displayed in a dialogue window. This may take some time. Tap **OK** to confirm and to save the displayed data in the PocketServer for the respective logger.

If no coordinates can be determined, an error message appears.

5.8 Programming



The function 'Programming devices' does not belong to the PocketServer basic equipment. It is only available after acquisition and input of a license key in the device.

To program a logger, proceed as follows:

- ▶ In the start screen, tap **LOG P-3/LOG P-3-mini**.
- ▶ Select the desired logger from the **Devices** list.
- ▶ Tap **Program**.
- ▶ You may be prompted to read out the current settings of the logger now. Tap **Read**.
The connection to the device is established and the data is received by the PocketServer.
- ▶ Open the **Measurement settings** drop-down menu and enter the desired parameters:
 - **Comment**
Here you can enter a comment on the device or change the comment.
 - **Interval**
Select the measurement interval.
 - **Pressure shocks**
Should pressure fluctuations (pressure shocks) be recorded?
Then activate the checkbox **active**. Then, under **Threshold**, specify the amount of

pressure change to be a 'pressure shock'. Activate the checkbox **10Hz sampling**, if the recording should take place with an extra high sampling rate. Caution: The high sampling rate subjects the logger battery to an extremely high load! When the checkbox is deactivated, the sampling rate is only 1 Hz.

- **Unit**

Select the measuring unit for the measurements.

- **Storage**

Activate/deactivate the ring storage function for the data storage of the logger.

- **End of measurement**

Should the measurement end at a certain time?

If so, activate the checkbox **active** and enter the time and date for the end of the measurement.



For detailed explanations of the individual settings, refer to the operating instructions of the logger.

► Tap on the **Send** button at the bottom of the input mask.

The configuration is sent from the PocketServer to the logger and applied there. A success message appears at the end of the operation.

5.9 Export data

You can connect a USB data store to the PocketServer and copy data from loggers to it. From the USB stick, the data can then be imported to the Seba DataView-3 software.

► Connect the USB stick to the USB socket of the PocketServer.

► In the PocketServer start screen, tap **LOG P-3/LOG P-3-mini**.

Option 1: Exporting all data from all loggers To copy all data of all loggers from the PocketServer to the USB stick (measured data, configuration data, event list, etc.), go on as follows:

► Tap the button

► In the context menu, tap **Export**.

The data is transmitted. A success message appears at the end of the operation.

Option 2: Exporting all data of a logger To copy all data of a specific logger from the PocketServer to the USB stick (measured data, configuration data, event list, etc.), go on as follows:

► Select the desired logger from the **Devices** list.

► Tap the button

► In the context menu, tap **Export**.

The data is transmitted. A success message appears at the end of the operation.

Option 3: Exporting a measurement To copy the data of an individual measurement from PocketServer to the USB stick, go on as follows:

► Select the desired logger from the **Devices** list.

► Select the desired data record from the **Data** list.

► Tap the button .

► In the context menu, tap **Export**.

The data is transmitted. A success message appears at the end of the operation.

Safely removing the USB device To safely remove the USB stick from the PocketServer, follow these steps:

► Tap the button .

► Tap **USB**.

► Tap **Remove USB device**.

You can now remove the USB stick.

5.10 Firmware update

SebaKMT provides regularly updated versions of the firmware at www.sebakmt.com for all devices. Check and update regularly the firmware of your devices.

Identifying the firmware version In order to determine which firmware version is currently installed on a P-3 / P-3 mini logger, read out its configuration.

► In the start screen, tap **LOG P-3/LOG P-3-mini**.

► Select the logger from the **Devices** list.

► Tap **Settings**.

The connection to the logger is established. The configuration of the device will be read out. The firmware version is shown in the **Device info** drop-down menu.

Downloading update files The following is needed:

- Computer with USB interface and internet access
- A USB stick

Proceed as follows:

► Visit www.sebakmt.com and search for the current firmware for **LOG P-3** loggers.

► Download the firmware to the computer. If it is a packed directory with the extension **.zip**, unpack it. The name of the required firmware file ends with **.ip3**

► Connect the USB stick to the computer.

► Copy the unpacked firmware file to the main directory of the USB stick.

► Remove the USB stick from the computer ('Safely remove hardware').

Performing an update ► Connect the USB stick to the PocketServer.

► In the PocketServer user interface, tap the  button.

► Tap **Update**.

► Tap **LOG P-3 / P-3-Mini**.

A window opens with two drop-down lists.

► In the first list, select the firmware file.

- ▶ In the second list, select the device to be updated.
 - ▶ Tap **Install**.
- The update begins!

**NOTE**

Do not interrupt the process. Do not make any entries until the update is complete.

The connection between PocketServer and device is established. The firmware data is transmitted. The wireless LED of the PocketServer lights up blue. The status LED on the logger lights up blue. Progress of the procedure is displayed on the screen. If an error occurs (error message), the process must be restarted. After successful data transfer, the new firmware is installed on the logger. The status LED on the device lights up red. The device is then restarted.

The firmware update is now complete.

If you read out the configuration of the logger, under **Device info**, the new firmware version is displayed.

Safely removing the USB device To safely remove the USB stick from the PocketServer, follow these steps:

▶ Tap the button .

▶ Tap **USB**.

▶ Tap **Remove USB device**.

You can now remove the USB stick.

6 LOG D-3 / SebaFlow / TDM 300

Here you can find information about all functions that are available for working with **LOG D-3** data loggers and **SebaFlow** and **TDM 300** devices.

6.1 Managing devices in PS-3

Each logger and device to be contacted must be logged into PocketServer.

- In the start screen, tap **LOG D-3 / SF / TDM 300**.
The menu of the same name opens.

Display area The display area is divided into two areas. In the **Function** section you will find the functions for adding devices. In the **Devices** section, all added devices are listed.



Adding a device **Option 1: Entry of the ID**

- Tap **Create**.
A dialogue window opens.
- Enter the identification number (ID) of the device.
- Confirm with **Create**.
The dialogue window closes. The newly created device now appears in the device list.

Option 2: Automatic detection

- Tap **Auto-Detection**.
- Switch the device on or briefly activate it (that is, briefly touch the I/O surface with a magnet).
The ID of the device is recognised by the PocketServer. The device now appears in the device list.
- Tap **Stop auto-detection**.

Deleting a device

- ▶ Tap the button .
- ▶ In the context menu, tap **Delete**.
- ▶ Select the desired device from the **Devices** list.
- ▶ Answer the confirmation prompt with **OK**.
The device disappears from the device list. All data of the device are deleted from the PocketServer.
- ▶ Tap the button .

6.2 Reading the measured data

To read out the measured data from the device, proceed as follows:

- ▶ In the start screen, tap **LOG D-3 / SF / TDM 300**.
- ▶ Select the desired device from the **Devices** list.
- ▶ Tap **Measurement data**.
- ▶ Decide whether **All data** or **New data only** will be read out.

‘New data only’ means: Only the measurement data that has been recorded since the last reading is read out.

‘All data’ means: All measured data saved in the logger is read out.

The connection to the device is established. The data is received by the PocketServer and displayed on the screen.

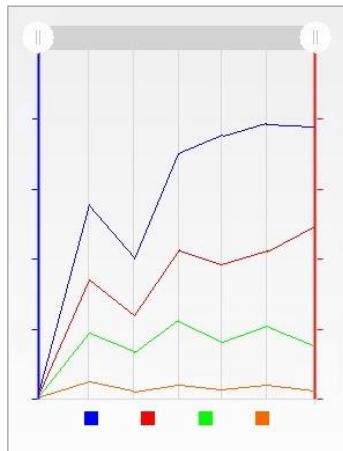
After closing the measurement data display, you will find this data record as a new entry under **Data**. It can be accessed and displayed there at any time.

6.3 Displaying measurement data

Read-out measured data is saved in the PocketServer.
To access a measurement record, proceed as follows:

- ▶ In the start screen, tap **LOG D-3 / SF / TDM 300**.
- ▶ Select the desired device from the **Devices** list.
- ▶ Select the desired measured data from the **Data** list.

The measurement data display opens:



X-axis ... course of measurement over time
 Y-axis ... measurements

Up to four curves can be seen:

- Blue ... Measuring channel 1
- Red ... Measuring channel 2
- Green ... Measuring channel 3
- Orange ... Measuring channel 4

Hiding a curve

You can hide any of the curves in the diagram view.

- Click on the corresponding coloured rectangle under the diagram. To show it again, tap on the same rectangle.

Zoom

You can narrow the chart view to any time range.

Option 1:

- Touch a point on the diagram and slide your finger to the side to highlight the desired area.

Option 2:

- Slide the two control elements to the left/right at the top of the diagram.



Reset:

- Tap **Show all** to reset the view.

Individual values

For each individual recording in the diagram, you can find the **measured value** and the exact **time of the measurement**.

- Touch the desired point in the diagram.

A vertical red line appears (cursor). The time of the individual recording is displayed at the base of the line. At the intersections with each curve, the measured value can be read.



Metadata

You can display additional information about this data record.

► Tap the button .

► In the context menu, tap **File info**.

Above the diagram, a new area opens in which the data are listed.

► To hide, tap again on  button and then on **Hide info**.

6.4 Reading out a configuration

To read out the current programming of the logger/device, proceed as follows:

► In the start screen, tap **LOG D-3 / SF / TDM 300**.

► Select the desired device from the **Devices** list.

► Tap **Settings**.

The connection to the device is established. The data is received from the PocketServer.

On the screen, you will find the data in these drop-down menus:

Device info

- **Firmware**
Currently used firmware version of the device
- **Battery**
Battery level of the device (full/good/OK/poor)
- **Time**
Internal date and time of the device (at the readout time)
- **Storage**
Indicates whether or not the data storage of the device operates as a 'ring storage'.

- **Comment**

Comment text for this device

Measurement settings

- **Interval**

Currently set measurement interval

- The **Channel 1** to **Channel 4** drop-down menus show which measurement channels are activated and which sensor settings have been made.

- The **Alarm input 1** and **Alarm input 2** drop-down menus show whether alarm-triggering devices are connected.

GSM settings **GSM active** indicates whether or not the GSM function of the device is activated. Below are the GSM settings that were made when programming the device.

After closing the configuration data display, you will find this data record as a new entry under **Data**. It can be accessed and displayed again there at any time.

6.5 Reading out pressure shocks

When reading the measured data, the pressure shock recordings are not transferred. These records must be requested by the logger/device separately.

- In the start screen, tap **LOG D-3 / SF / TDM 300**.
- Select the desired device from the **Devices** list.
- Tap **Pressure shocks**.

The connection to the device is established. The data is received by the PocketServer and displayed on the screen.

In the diagram, the 60-second recording is shown as a curve. In the field below the diagram, the date and time of the pressure shock are shown.



- Tap this field to open a list of all pressure shock recordings.
(If no list appears, no further recordings are present.)
- In the list, tap on a pressure shock to open it in the diagram.

After closing the pressure shock display, you will find this data record as a new entry under **Data**. It can be accessed and displayed again there at any time.

6.6 Reading out night values

This function reads the lowest and the highest reading of the previous night* from the logger/device.

- In the start screen, tap **LOG D-3 / SF / TDM 300**.
- Select the desired device from the **Devices** list.
- Tap **Night data**.

The connection to the device is established. The data is received by the PocketServer and displayed on the screen.

The largest measurement value per measuring channel is specified by **Max value**. The smallest measurement value per measuring channel is specified by **Min value**. The total flow quantity of the previous night* is specified by **Sum** (only applies to flow measurements).

At the bottom of the display are the start and end of the observed period.

After closing the night value display, you will find this data record as a new entry under **Data**. It can be accessed and displayed there at any time.



This function is primarily useful for flow measurements.

Advantage compared to the complete measurement data selection: Small data packet, fast data transfer, low load on the battery of the logger/device.

*The 24-hour period from 6 am of the previous day to 6 am today is considered. If this period has not yet been completed, the previous, completed 24-hour period is considered.

6.7 Reading out an event list

To read out the event list from the logger/device, proceed as follows:

- In the start screen, tap **LOG D-3 / SF / TDM 300**.
- Select the desired device from the **Devices** list.
- Tap **Event list**.

The connection to the device is established. The event data is received by the PocketServer and displayed on the screen.

6.8 Real-time measurements

You can perform a real-time measurement with the logger/device. The measured values are displayed 'live' on the screen.



NOTE

The real-time measurement requires a great deal of energy and considerably reduces the battery life of the logger/device. Only use the real-time measurement for as long as necessary.

- In the start screen, tap **LOG D-3 / SF / TDM 300**.

- ▶ Select the desired device data from the **Devices** list.

- ▶ Tap **Realtime**.

The connection to the device is established. The device starts to measure. The recorded values are received in real time by the PocketServer and displayed in a diagram. Up to four curves can be seen. Each curve represents a measurement channel of the device.

Stopping/resuming a measurement

- ▶ Tap the Stop button  in the top left to stop the current measurement.

The device stops recording and transmitting data to the PocketServer. The diagram view freezes. A dialogue window opens. Decide here whether you want to save the data from this measurement to the PocketServer.

- ▶ Tap the Play button  in the top left to resume the stopped measurement.

Editing a diagram

With the checkbox **Val.**, a small table can be shown/hidden. This contains the current measurement interval and the last measured value of each measuring channel. You can touch and drag this table on the screen.

You can hide curves from the diagram. To do so, tap on the corresponding coloured rectangles below the diagram.

You can narrow the time range (zoom function). To do so, mark the desired area in the diagram with your finger or move the two controls at the top in the diagram. Tap 'Show all' to reset.

You can display the values of each individual recording. To do so, touch the desired point on a curve. A vertical red line appears. The level, frequency and time of the recording can be read off there.

(These functions are also explained in the section **Displaying measurement data**.)

Changing the number of displayed values

In the system settings of the PocketServer, you can specify how many values will be displayed in the diagram.

- ▶ If a real-time measurement is running, interrupt it with the Stop button .

- ▶ Tap the  button to go to the system settings.

- ▶ Tap **Settings**.

- ▶ Tap **Realtime view**.

- ▶ Select the desired number from the drop-down list.

Example: If you select the option **Show all**, each new recording will be added to the diagram. All values of the running real-time measurement can be seen in the diagram.

If you select the option **10 values**, only the last 10 recordings are always displayed in the diagram. When each new recording is added, the oldest recording disappears from the view.

- ▶ Confirm with **OK**.

- ▶ With the  button, you can return to the real-time measurement. The connection between PocketServer and the device is immediately re-established and the real-time measurement is restarted.

6.9 GPS position

You can determine and store the GPS data for the location of a logger/device.

Requirements:

- Your mobile device (smartphone or tablet etc.) must be GPS-capable.
- The GPS function of your mobile device must be activated (location services activated).

Procedure:

- ▶ Go to the installation location of the device with your mobile device.
- ▶ In the PocketServer start screen, tap **LOG D-3 / SF / TDM 300**.
- ▶ Select the desired device from the **Devices** list.
- ▶ Tap the button .
- ▶ In the context menu, tap **GPS**.

The GPS coordinates of the mobile device are determined and displayed in a dialogue window. This may take some time. Tap **OK** to confirm and to save the displayed data in the PocketServer for the respective device.

If no coordinates can be determined, an error message appears.

6.10 Programming



The function 'Programming devices' does not belong to the PocketServer basic equipment. It is only available after acquisition and input of a license key in the device.

To program a logger/device, proceed as follows:

- ▶ In the start screen, tap **LOG D-3 / SF / TDM 300**.
- ▶ Select the desired device from the **Devices** list.
- ▶ Tap **Program**.
On the screen, you will find the **Measurement settings** and **GSM settings** drop-down menus. There all adjustable parameters are compiled.
- ▶ You may be prompted to read out the current programming of the device now. In this case, tap on the additionally available button **Read**.
The connection to the device is established and the data is received by the PocketServer.
- ▶ Enter the desired settings.

Measurement settings

- **Comment**
Here you can enter general information on the device, installation site, etc.
- **Storage**
Activate/deactivate the ring storage function for the data storage of the logger/device.

- **Interval**
Select the measurement interval

Channel 1 to Channel 4 drop-down menus

You can find the measurement-channel specific settings here:

- **Channel active**
Activate/deactivate the measurement channel for the measurement.
A deactivated channel does not participate in the measurement. All sensor settings are then hidden.
- **Sensor**
Select the connected sensor type from the list. Most other parameters are inserted automatically
If the correct type is not in the list, select **User defined**.
- **Type**
Select the type of input signal from the list (voltage, pulse, etc.)
- **Unit**
Select the measuring unit for the measurements.
- **Conversion**
Provide information on converting signal input values in output measurements.
Example pressure measurement: 5 V at the sensor equals 10 bar in the display (or similar)
- **Pressure shocks**
Should pressure fluctuations (pressure shocks) be recorded? Then activate the checkbox **active**. Then, under **Threshold**, specify the amount of pressure change to be a 'pressure shock'. Activate the checkbox **10Hz sampling**, if the recording should take place with an extra high sampling rate. Caution: The high sampling rate subjects the logger battery to an extremely high load! When the checkbox is deactivated, the sampling rate is only 1 Hz.
- **Counter**
For flow measurements, you can enter the counter reading of a water meter as a basis for comparison here.

Alarm input 1 and Alarm input 2 drop-down menus

The settings for setting up alarm loops with external alarm devices are found here:

- **Trigger**
Select the input voltage at which an alarm will be triggered.
5V ... Alarm at >2.5 V at signal input
0V ... Alarm at <2.5 V at signal input
- **Destination**
Select the alarm destination.



For detailed explanations of the individual settings, refer to the operating instructions of the logger/device.

GSM settings **GSM active**

- **active** checkbox
 - Radio transmission possible
 - Radio transmission not possible
 When this checkbox is deactivated, the device cannot send or receive cellular signals.
- Enter the 4-digit **PIN** for the SIM card used in the device.

Internet settings (APN)

- Enter the data required for internet access (**server address, DNS1, DNS2, user name, password**).

FTP

- **active** checkbox

Should data transfer between the device and FTP server be possible?

 - FTP function activated
 - FTP function deactivated
 When this checkbox is deactivated, the device cannot upload data to an FTP server or download data from one.
- **FTP configuration** Checkbox
 - Programming via FTP server possible
 - Programming via FTP server not possible
- **Event data** checkbox
 - Regular FTP upload of the 'Event list'
 - No upload possible
- **FTP step test** checkbox
 - The device will start a 'Step Test' after the programming
 - No step test
- **CSV upload** checkbox
 - Regular FTP upload of measured data in CSV format
 - No upload possible
- **CSV size**

Select the size of the CSV data packets.
- **Upload time**

Select the time for the daily measured data upload.

If a second measured data upload should take place per day, activate the **2nd upload** checkbox and select the time for this upload.

FTP settings

- Enter the access data for the FTP server (**server address, port, user name, password**).
- Select an encryption standard.

E-mail

- **active** checkbox

Should e-mail notifications be issued?

E-mails possible

E-mails not possible

When this checkbox is deactivated, it is not possible for the device to send alarm or status messages via e-mail.

- **Alarm/Status** radio buttons

Select the type of notifications that will be issued:

Only alarms; alarms and 1x status per day; alarms and 1x status per week

- **Weekday/Time**

Enter the time and weekday for receiving status messages.

- **E-mail recipients**

Enter up to two e-mail addresses as recipients.

E-mail settings

- Enter the credentials for the sending e-mail account (**sender identification, server address, port, domain, user name, password**).
- Select an encryption standard.

SMS

- **active** checkbox

Should SMS notifications be issued?

SMS possible

SMS not possible

When this checkbox is deactivated, it is not possible for the device to send alarm or status messages via SMS.

- **Alarm/Status** radio buttons

Select the type of notifications that will be issued:

Only alarms; alarms and 1x status per day; alarms and 1x status per week

- **Weekday/Time**

Enter the time and weekday for receiving status messages.

- **SMS recipients**

Enter up to three telephone numbers as SMS recipients.

Example: +491701234567



For detailed explanations of the individual settings, refer to the operating instructions of the logger/device.

6.11 Export data

You can connect a USB data store to the PocketServer and copy data from the PocketServer to the USB stick. From the USB stick, the data can then be imported to the Seba DataView-3 software.

- ▶ Connect the USB stick to the USB socket of the PocketServer.
- ▶ In the PocketServer start screen, tap **LOG D-3 / SF / TDM 300**.

Option 1: Exporting all data of all devices To copy all data of all devices from the PocketServer to the USB stick (measured data, configuration data, event data, etc.), proceed as follows:

- ▶ Tap the button .
- ▶ In the context menu, tap **Export**.

The data is transmitted. A success message appears at the end of the operation.

Option 2: Exporting all data of a device To copy all data of a specific device from the PocketServer to the USB stick (measured data, configuration data, event data, etc.), proceed as follows:

- ▶ Select the desired device from the **Devices** list.
- ▶ Tap the button .
- ▶ In the context menu, tap **Export**.

The data is transmitted. A success message appears at the end of the operation.

Option 3: Exporting a measurement To copy the measured data of an individual measurement from PocketServer to the USB stick, proceed as follows:

- ▶ Select the desired device from the **Devices** list.
- ▶ Select the desired data record from the **Data** list.
- ▶ Tap the button .
- ▶ In the context menu, tap **Export**.

The data is transmitted. A success message appears at the end of the operation.

Safely removing the USB device To safely remove the USB stick from the PocketServer, follow these steps:

- ▶ Tap the button .
- ▶ Tap **USB**.
- ▶ Tap **Remove USB device**.

You can now remove the USB stick.

6.12 Firmware update

SebaKMT provides regularly updated versions of the firmware at www.sebakmt.com for all devices. Check and update regularly the firmware of your devices.

Identifying the firmware version In order to determine which firmware version is currently installed on a device, read out its configuration. The version is shown in the **Device info** section.

Downloading update files The following is needed:

- Computer with USB interface and internet access
- A USB stick

Proceed as follows:

- ▶ Visit www.sebakmt.com and search for the current firmware for the corresponding device type.
- ▶ Download the firmware to the computer. If it is a packed directory with the extension **.zip**, unpack it. The name of the required firmware file ends with **.ld3**
- ▶ Connect the USB stick to the computer.
- ▶ Copy the firmware file to the main directory of the USB stick.
- ▶ Remove the USB stick from the computer ('Safely remove hardware').

Performing an update

- ▶ Connect the USB stick to the PocketServer.
- ▶ In the PocketServer user interface, tap the  button.
- ▶ Tap **Update**.
- ▶ Tap **LOG D-3 / SF / TDM 300**.
A window opens with two drop-down lists.
- ▶ In the first list, select the firmware file.
- ▶ In the second list, select the device to be updated.
- ▶ Tap **Install**.
The update begins!



NOTE
Do not interrupt the process. Do not make any entries until the update is complete.

The connection between PocketServer and device is established. The firmware data is transmitted. The wireless LED of the PocketServer lights up blue. The status LED on the device lights up blue/white. Progress of the procedure is displayed on the screen. If an error occurs (error message), the process must be restarted. After successful data transfer, the new firmware is installed on the device. The status LED on the device lights up red. The device is then restarted.

The firmware update is now complete.

If you read out the configuration of the device, under **Device info**, the new firmware version is displayed.

Safely removing the USB device To safely remove the USB stick from the PocketServer, proceed as follows:

- ▶ Tap the button .
- ▶ Tap **USB**.
- ▶ Tap **Remove USB device**.

You can now remove the USB stick.

7 LOG DX / TDM 200

Here you can find information about all functions that are available for working with **LOG DX** data loggers and **TDM 200** devices.

7.1 Managing devices in PS-3

Each logger and device to be contacted must be logged into PocketServer.

- In the start screen, tap **LOG DX / TDM 200**.
The menu of the same name opens.

Display area The display area is divided into two areas. In the **Function** section you will find the functions for adding devices. In the **Devices** section, all added devices are listed.



Adding a device **Option 1: Entry of the ID**

- Tap **Create**.
A dialogue window opens.
- Enter the identification number (ID) of the device.
- Confirm with **Create**.
The dialogue window closes. The newly created device now appears in the device list.

Option 2: Automatic detection

- Tap **Auto-Detection**.
- Switch the device on.
The ID of the device is recognised by the PocketServer. The device now appears in the device list.
- Tap **Stop auto-detection**.

Deleting a device

- Tap the button .
- In the context menu, tap **Delete**.

- ▶ In the **Devices** section, select the corresponding device.
- ▶ Answer the confirmation prompt with **OK**.
The device disappears from the device list. All data of the device are deleted from the PocketServer.
- ▶ Tap the button 

7.2 Reading the measured data

To read out the measured data from the device, proceed as follows:

- ▶ In the start screen, tap **LOG DX / TDM 200**.
- ▶ Select the desired device from the **Devices** list.
- ▶ Tap **Measurement data**.
- ▶ Decide whether **All data** or **New data only** will be read out.

‘New data only’ means: Only the measurement data that has been recorded since the last reading are read out.

‘All data’ means: All measured data saved in the logger is read out.

The connection to the device is established. The data is received by the PocketServer and displayed on the screen.

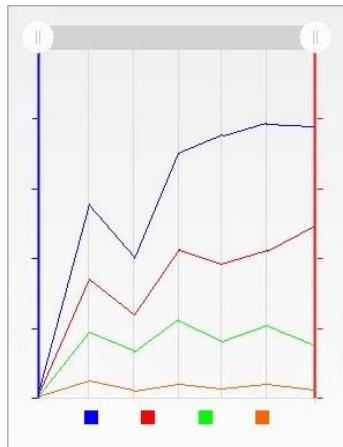
After closing the measurement data display, you will find this data record as a new entry under **Data**. It can be accessed and displayed there at any time.

7.3 Displaying measurement data

Read-out measured data is saved in the PocketServer.
To access a measurement record, proceed as follows:

- ▶ In the start screen, tap **LOG DX / TDM 200**.
- ▶ Select the desired device from the **Devices** list.
- ▶ Select the desired measured data from the **Data** list.

The measurement data display opens:



X-axis ... course of measurement over time
Y-axis ... measurements

Up to four curves can be seen:

- █ Blue ... Measuring channel 1
- █ Red ... Measuring channel 2
- █ Green ... Measuring channel 3
- █ Orange ... Measuring channel 4

Hiding a curve

You can hide any of the curves in the diagram view.

- Click on the corresponding coloured rectangle under the diagram. To show it again, tap on the same rectangle.

Zoom

You can narrow the chart view to any time range.

Option 1:

- Touch a point on the diagram and slide your finger to the side to highlight the desired area.

Option 2:

- Slide the two control elements to the left/right at the top of the diagram.



Reset:

- Tap **Show all** to reset the view.

Individual values

For each individual recording in the diagram, you can find the **measured value** and the exact **time of the measurement**.

- Touch the desired point in the diagram.

A vertical red line appears (cursor). The time of the individual recording is displayed at the base of the line. At the intersections with each curve, the measured values can be read.



Metadata

You can display additional information about this data record.

► Tap the button .

► In the context menu, tap **File info**.

Above the diagram, a new area opens in which the data are listed.

► To hide, tap again on  button and then on **Hide info**.

7.4 Reading out a configuration

To read out the current programming of the logger/device, proceed as follows:

► In the start screen, tap **LOG DX / TDM 200**.

► Select the desired device from the **Devices** list.

► Tap **Settings**.

The connection to the device is established. The data is received from the PocketServer.

On the screen, you will find the data in these drop-down menus:

Device info

- **Firmware**

Currently used firmware version of the device

- **Battery**

Battery level of the device (full / good / OK / bad) is shown

- **Time**

Internal date and time of the device (at the readout time)

- **Storage**

Indicates whether or not the data storage of the device operates as a 'ring storage'.

- **Comment**

Comment text for this device

Measurement settings

- **Interval**
Currently set measurement interval
- The **Channel 1** to **Channel 4** drop-down menus show which measurement channels are activated and which sensor settings have been made.
- The **Alarm input 1** and **Alarm input 2** drop-down menus show whether alarm-triggering devices are connected.

GSM settings **GSM active** indicates whether or not the GSM function of the device is activated. Below are the GSM settings that were made when programming the device.

After closing the configuration data display, you will find this data record as a new entry under **Data**. It can be accessed and displayed again there at any time.

7.5 Reading out pressure shocks

When reading the measured data, the pressure shock recordings are not transferred. These records must be requested by the logger/device separately.

- ▶ In the start screen, tap **LOG DX / TDM 200**.
- ▶ Select the desired device from the **Devices** list.
- ▶ Tap **Pressure shocks**.

The connection to the device is established. The data is received by the PocketServer and displayed on the screen.

In the diagram, the 60-second recording is shown as a curve. In the field below the diagram, the date and time of the pressure shock are shown.



- ▶ Tap this field to open a list of all pressure shock recordings.
(If no list appears, no further recordings are present.)
- ▶ In the list, tap on a pressure shock to open it in the diagram.

After closing the pressure shock display, you will find this data record as a new entry under **Data**. It can be accessed and displayed again there at any time.

7.6 Reading out night values

This function reads the lowest and the highest reading of the previous night* from the logger/device.

- ▶ In the start screen, tap **LOG DX / TDM 200**.
- ▶ Select the desired device from the **Devices** list.
- ▶ Tap **Night data**.

The connection to the device is established. The data is received by the PocketServer and displayed on the screen.

The largest measurement value per measuring channel is specified by **Max value**. The smallest measurement value per measuring channel is specified by **Min value**. The total flow quantity of the previous night* is specified by **Sum** (only applies to flow measurements).

At the bottom of the display are the start and end of the observed period.

After closing the night value display, you will find this data record as a new entry under **Data**. It can be accessed and displayed there at any time.

INFO

This function is primarily useful for flow measurements.

Advantage compared to the complete measurement data selection: Small data packet, fast data transfer, low load on the battery of the logger/device.

*The 24-hour period from 6 am of the previous day to 6 am today is considered. If this period has not yet been completed, the previous, completed 24-hour period is considered.

7.7 Reading out an event list

To read out the event list from the logger/device, proceed as follows:

- ▶ In the start screen, tap **LOG DX / TDM 200**.
- ▶ Select the desired device from the **Devices** list.
- ▶ Tap **Event list**.

The connection to the device is established. The event data is received by the PocketServer and displayed on the screen.

7.8 Real-time measurements

You can perform a real-time measurement with the logger/device. The measured values are displayed 'live' on the screen.

NOTE

The real-time measurement requires a great deal of energy and considerably reduces the battery life of the logger/device. Only use the real-time measurement for as long as necessary.

- ▶ In the start screen, tap **LOG DX / TDM 200**.
- ▶ Select the desired device data from the **Devices** list.
- ▶ Tap **Realtime**.

The connection to the device is established. The device starts to measure. The recorded values are received in real time by the PocketServer and displayed in a diagram. Up to four curves can be seen. Each curve represents a measurement channel of the device.

Stopping/resuming a measurement

- ▶ Tap the Stop button  in the top left to stop the current measurement.

The device stops recording and transmitting data to the PocketServer. The diagram view freezes. A dialogue window opens. Decide here whether you want to save the data from this measurement to the PocketServer.

- Tap the Play button  in the top left to resume the stopped measurement.

Editing a diagram With the checkbox **Val.**, a small table can be shown/hidden. This contains the current measurement interval and the last measured value of each measuring channel. You can touch and drag this table on the screen.

You can hide curves from the diagram. To do so, tap on the corresponding coloured rectangles below the diagram.

You can narrow the time range (zoom function). To do so, mark the desired area in the diagram with your finger or move the two controls at the top in the diagram. Tip 'Show all' to reset.

You can display the values of each individual recording. To do so, touch the desired point on a curve. A vertical red line appears. The level, frequency and time of the recording can be read off there.

(These functions are also explained in the section **Displaying measurement data**.)

Changing the number of displayed values In the system settings of the PocketServer, you can specify how many values will be displayed in the diagram.

- If a real-time measurement is running, interrupt it with the Stop key .
- Tap the  button to go to the system settings.
- Tap **Settings**.
- Tap **Realtime view**.
- Select the desired number from the drop-down list.
- Example: If you select the option **Show all**, each new measurement will be added to the diagram. All values of the previous measurement can be seen in the diagram.
- If you select the option **10 values**, only the last 10 measurements are always displayed in the diagram. When each new recording is added, the oldest recording disappears from the view.
- Confirm with **OK**.
- With the  button, you can return to the real-time measurement. The connection between PocketServer and the device is immediately re-established and the real-time measurement is restarted.

7.9 GPS position

You can determine and store the GPS data for the location of a logger/device.

Requirements:

- Your mobile device (smartphone or tablet etc.) must be GPS-capable.
- The GPS function of your mobile device must be activated (location services activated).

Procedure:

- Go to the installation location of the device with your mobile device.

- ▶ In the PocketServer start screen, tap **LOG DX / TDM 200**.

- ▶ Select the desired device from the **Devices** list.

- ▶ Tap the button .

- ▶ In the context menu, tap **GPS**.

The GPS coordinates of the mobile device are determined and displayed in a dialogue window. This may take some time. Tap **OK** to confirm and to save the displayed data in the PocketServer for the respective device.

If no coordinates can be determined, an error message appears.

7.10 Programming



The function 'Programming devices' does not belong to the PocketServer basic equipment. It is only available after acquisition and input of a license key in the device.

To program a logger/device, proceed as follows:

- ▶ In the start screen, tap **LOG DX / TDM 200**.

- ▶ Select the desired device from the **Devices** list.

- ▶ Tap **Program**.

On the screen, you will find the **Measurement settings** and **GSM settings** drop-down menus. There all adjustable parameters are compiled.

- ▶ You may be prompted to read out the current programming of the device now. In this case, tap on the additionally available button **Read**.

The connection to the device is established and the data is received by the PocketServer.

- ▶ Enter the desired settings.

Measurement settings

- **Comment**

Here you can enter the general information on the device, installation site, etc.

- **Storage**

Activate/deactivate the ring storage function for the data storage of the logger/device.

- **Interval**

Select the measurement interval

Channel 1 to Channel 4 drop-down menus

You can find the measuring channel specific settings here:

- **Channel active**

Activate/deactivate the measuring channel for the measurement.

A deactivated channel does not participate in the measurement. All sensor settings are then hidden.

- **Sensor**

Select the connected sensor type from the list. Most other parameters are inserted automatically

If the correct type is not in the list, select **User defined**.

- **Type**

Select the type of input signal from the list (voltage, pulse, etc.)

- **Unit**

Select the measuring unit for the measurements.

- **Conversion**

Provide information on converting signal input values in output measurements.

Example pressure measurement: 5 V at the sensor equals 10 bar in the display (or similar)

- **Pressure shocks**

Should pressure fluctuations (pressure shocks) be recorded? Then, under **Threshold**, specify the amount of pressure change to be a 'pressure shock'. Activate the checkbox **10Hz sampling**, if the recording should take place with an extra high sampling rate. Caution: The high sampling rate subjects the logger battery to an extremely high load! When the checkbox is deactivated, the sampling rate is only 1 Hz.

- **Counter**

For flow measurements, you can enter the counter reading of a water meter as a basis for comparison here.

Alarm input 1 and Alarm input 2 drop-down menus

The settings for setting up alarm loops with external alarm devices are found here:

- **Trigger:**

Select the input voltage at which an alarm will be triggered.

5V ... Alarm at >2.5 V at signal input

0V ... Alarm at <2.5 V at signal input

- **Destination:**

Select the alarm destination.



For detailed explanations of the individual settings, refer to the operating instructions of the logger/device.

GSM settings GSM active

- **active** checkbox

Radio transmission possible

Radio transmission not possible

When this checkbox is deactivated, the device cannot send or receive cellular signals.

- Enter the 4-digit **PIN** for the SIM card used in the device.

Internet settings (APN)

- Enter the data required for internet access (**server address, DNS1, DNS2, user name, password**).

FTP

- **active** checkbox
Should data transfer between the device and FTP server be possible?
 FTP function activated
 FTP function deactivated
When this checkbox is deactivated, the device cannot upload data to an FTP server or download data from one.
- **FTP configuration** Checkbox
 Programming via FTP server possible
 Programming via FTP server not possible
- **Event data** checkbox
 Regular FTP upload of the 'Event list'
 No upload possible
- **FTP step test** checkbox
 The device will start a 'Step test' after the programming
 No step test
- **Upload time:**
Select the time for the daily measured data upload.
If a second measured data upload should take place per day, activate the **2nd upload** checkbox and select the time for this upload.

FTP settings

- Enter the access data for the FTP server (**server address, port, user name, password**).

E-mail

- **active** checkbox
Should e-mail notifications be issued?
 E-mails possible
 E-mails not possible
When this checkbox is deactivated, it is not possible for the device to send alarm or status messages via e-mail.
- **Alarm/Status** radio buttons
Select the type of notifications that will be issued:
Only alarms; alarms and 1x status per day; alarms and 1x status per week
- **Weekday/Time**
Enter the time and weekday for receiving status messages.
- **E-mail recipient:**
Enter up to two e-mail addresses as recipients.

E-mail settings

- Enter the credentials for the sending e-mail account (**sender identification, server address, port, domain, user name, password**).

SMS

- **active** checkbox

Should SMS notifications be issued?

SMS possible

SMS not possible

When this checkbox is deactivated, it is not possible for the device to send alarm or status messages via SMS.

- **Alarm/Status** radio buttons:

Select the type of notifications that will be issued:

Only alarms; alarms and 1x status per day; alarms and 1x status per week

- **Weekday/Time**

Enter the time and weekday for receiving status messages.

- **SMS recipients**

Enter up to three telephone numbers as SMS recipients.

Example: +491701234567



For detailed explanations of the individual settings, refer to the operating instructions of the logger/device.

7.11 Export data

You can connect a USB data store to the PocketServer and copy data from the PocketServer to the USB stick. From the USB stick, the data can then be imported to the SebaDataView-3 software.

► Connect the USB stick to the USB socket of the PocketServer.

► In the PocketServer start screen, tap **LOG DX / TDM 200**.

Option 1: Exporting all data of all devices To copy all data of all devices from the PocketServer to the USB stick (measured data, configuration data, event data, etc.), proceed as follows:

► Tap the button

► In the context menu, tap **Export**.

The data is transmitted. A success message appears at the end of the operation.

Option 2: Exporting all data of a device To copy all data of a specific device from the PocketServer to the USB stick (measured data, configuration data, event data, etc.), proceed as follows:

► Select the desired device from the **Devices** list.

► Tap the button

► In the context menu, tap **Export**.

The data is transmitted. A success message appears at the end of the operation.

Option 3: Exporting a measurement To copy the measured data of an individual measurement from PocketServer to the USB stick, proceed as follows:

- ▶ Select the desired device from the **Devices** list.
- ▶ Select the desired data record from the **Data** list.
- ▶ Tap the button .
- ▶ In the context menu, tap **Export**.

The data is transmitted. A success message appears at the end of the operation.

Safely removing the USB device To safely remove the USB stick from the PocketServer, follow these steps:

- ▶ Tap the button .
- ▶ Tap **USB**.
- ▶ Tap **Remove USB device**.

You can now remove the USB stick.

7.12 Firmware update

SebaKMT provides regularly updated versions of the firmware at www.sebakmt.com for all devices. Check and update regularly the firmware of your devices.

Identifying the firmware version In order to determine which firmware version is currently installed on a device, read out its configuration. The version is shown in the **Device info** section.

Downloading update files The following is needed:

- Computer with USB interface and internet access
- A USB stick

Proceed as follows:

- ▶ Visit www.sebakmt.com and search for the current firmware for the corresponding device type.
- ▶ Download the firmware to the computer. If it is a packed directory with the extension **.zip**, unpack it. The name of the required firmware file ends with **.Idx**
- ▶ Connect the USB stick to the computer.
- ▶ Copy the firmware file to the main directory of the USB stick.
- ▶ Remove the USB stick from the computer ('Safely remove hardware').

Performing an update ▶ Connect the USB stick to the PocketServer.

- ▶ In the PocketServer user interface, tap the  button.

- ▶ Tap **Update**.

- ▶ Tap **LOG DX / TDM 200**.

A window opens with two drop-down lists.

- ▶ In the first list, select the firmware file.

- ▶ In the second list, select the device to be updated.
 - ▶ Tap **Install**.
- The update begins!

**NOTE**

Do not interrupt the process. Do not make any entries until the update is complete.

The connection between PocketServer and device is established. The firmware data is transmitted. The wireless LED of the PocketServer lights up blue. The status LED on the device lights up blue/white. Progress of the procedure is displayed on the screen. If an error occurs (error message), the process must be restarted. After successful data transfer, the new firmware is installed on the device. The status LED on the device lights up red. The device is then restarted.

The firmware update is now complete.

If you read out the configuration of the device, under **Device info**, the new firmware version is displayed.

Safely removing the USB device To safely remove the USB stick from the PocketServer, proceed as follows:

- ▶ Tap the button .

- ▶ Tap **USB**.

- ▶ Tap **Remove USB device**.

You can now remove the USB stick.

8 PS-3 – Status & settings

Here you can find information about the PocketServer system settings.

You can access the **System settings** menu at any time by pressing the button .

8.1 Device info

To obtain general information on the device and current status information ...

► tap in the system settings menus on **Device info**.

Behind the displayed buttons you will find information on these areas:

Device

- **PocketServer ID**

Identification number (abbreviated as: ID) of the PocketServer; it can also be found on the type plate of the device

- **Serial number**

Serial number (abbreviated as: SN) of the PocketServer; it can also be found on the type plate of the device

- **WiFi SSID:**

Name of the PocketServer WiFi network

- **WiFi country code**

Displays the currently set country code for the PocketServer WiFi network. The country code is generated automatically from the region and time zone that the user has set for PocketServer.

- **Time zone**

Displays the region/time zone set by the user

- **Radio module**

Information on the radio module of the PocketServer

- **Storage**

Shows how much of the internal data storage is used as a percentage.

Battery

- **Charge state**

Current battery status of the PocketServer in per cent

- **Voltage**

Current battery voltage of the PocketServer in Volt

Software

- **Firmware**

Version number of the currently used PocketServer firmware

- **Kernel version**

Version number of the PocketServer operating system

- **Configurator**

Displays whether the PocketServer is enabled for programming devices.

 ... enabled

 ... not enabled

- **Correlator**

Displays whether the PocketServer is enabled for the correlation of measurements.

-  ... enabled
-  ... not enabled

- **Network**

Displays whether the PocketServer is enabled for managing device networks.

-  ... enabled
-  ... not enabled

Time/Date Displays the time and date currently set in PocketServer.

8.2 Settings

Various system settings can be customised by the user.

8.2.1 Language

You can change the operating language of the PocketServer user interface.

► From the start screen, tap on the following keys:



► Select your language from the list and confirm with **OK**.

8.2.2 Region and time zone

For correct functioning of the PocketServer, it is important that the device knows the region and the time zone in which it is located.

► Tap in the system settings menus on **Settings**.

► Tap **Region**.

► Select your region and time zone and confirm with **OK**.

8.2.3 Transfer rate

For the data transfer between the PocketServer and the devices **LOG D-3 / SebaFlow / TDM 300 / LOG P-3 / LOG P-3 mini**, one of the following transfer speeds can be set:

- **slow**
- **fast**

Fast transfer is the default setting. Under unfavourable radio conditions, the slow transmission setting can help reduce the number of data packets lost during transfer.

► Tap in the system settings menus on **Settings**.

► Tap **Data rate**.

► Select the desired option from the list and confirm with **OK**.

8.2.4 Real-time display

When a real-time measurement is performed, the recorded measured values are displayed 'live' in a diagram. By default, each newly recorded value is added to the chart

display without removing an older value from the display. Alternatively, it can be set to display only the last 10, 20, 50 or 100 readings in the diagram.

- ▶ Tap in the system settings menus on **Settings**.
- ▶ Tap **Real-time display**.
- ▶ Select the desired number from the drop-down list and confirm with **OK**.

Example: If you select the option **Show all**, each new recorded value will be added to the diagram. All values of the running real-time measurement can be seen in the diagram.

If you select the option **10 values**, only the last 10 readings are always displayed in the diagram. When each new recording is added, the oldest recording disappears from the view.

8.3 All other options

USB

Here you will find the following options:

- **Export**
Copies all data saved in the PocketServer to a connected USB stick.
- **Remove USB device**
Used to safely disconnect the connected USB stick from the PocketServer.

Update

Here you can find functions for performing firmware updates.

Detailed information on the topic can be found in the individual Firmware update sections in this help.

User manual

This button takes you to the PocketServer help area.

Shutdown

This button is used to turn off the PocketServer.

8.4 GPL information

In accordance with the 'GNU GPL Licence Version 2', this product has Linux (kernel version: 4.4.50-v7+). SebaKMT hereby offers to provide, upon request and at your own expense, a complete machine-readable copy of the corresponding source code of the adapted kernel modules on a medium suitable for the exchange of data.

Contact:

Seba Dynatronic Mess- und Ortungstechnik GmbH,
Dr.-Herbert-Iann-Str. 6,
D - 96148 Baunach.

This offer is valid for a period of three years, starting with the purchase date of this product.

9 PS-3 – Exporting all data

You can connect a USB data store to the PocketServer and copy all data in the device to it. From the USB stick, the data can then be imported to the SebaDataView-3 software.

- ▶ Connect the USB stick to the PocketServer.
- ▶ Tap the button .
- ▶ Tap **USB**.
- ▶ Tap **Export**.

The data is transmitted. A success message appears at the end of the operation.

To safely remove the USB stick from the PocketServer, follow these steps:

- ▶ Tap the button .
- ▶ Tap **USB**.
- ▶ Tap **Remove USB device**.

You can now remove the USB stick.

10 PS-3 – Firmware update

SebaKMT provides regularly updated versions of the firmware at www.sebakmt.com for all devices. Check and update regularly the firmware of your devices.

Identifying the firmware version In order to determine which firmware version is currently installed on PocketServer, proceed as follows:

- ▶ Tap the button .
- ▶ Tap **Device info**.
- ▶ Tap **Software**.

The firmware version is shown in the **Firmware** section.

Downloading update files The following is needed:

- Computer with USB interface and internet access
- A USB stick

Procedure:

- ▶ Visit www.sebakmt.com and search for the current firmware for the PocketServer **LOG PS-3**.
- ▶ Download the firmware to the computer.
- ▶ Connect the USB stick to the computer.
- ▶ Copy the firmware file to the main directory of the USB stick.
- ▶ Remove the USB stick from the computer ('Safely remove hardware').

Performing an update

- ▶ Connect the USB stick to the PocketServer.

▶ In the PocketServer user interface, tap the button .

▶ Tap **Update**.

▶ Tap **LOG PS-3**.

A window opens.

▶ In the list, select the desired firmware file.

▶ Tap **Install**.

The update starts.



NOTE

Do not interrupt the process. Do not make any entries until the update is complete.

Turn the PocketServer off and back on after the update.

The firmware update is now complete.

The new firmware version is now displayed in the system settings of the PocketServer (see above).

Safely removing the USB device To safely remove the USB stick from the PocketServer, follow these steps:

► Tap the button .

► Tap **USB**.

► Tap **Remove USB device**.

You can now remove the USB stick.



Tento symbol indikuje, že výrobek nesoucí takovéto označení nelze likvidovat společně s běžným domovním odpadem. Jelikož se jedná o produkt obchodovaný mezi podnikatelskými subjekty (B2B), nelze jej likvidovat ani ve veřejných sběrných dvorech. Pokud se potřebujete tohoto výrobku zbavit, obrátte se na organizaci specializující se na likvidaci starých elektrických spotřebičů v blízkosti svého působiště.



Dit symbool duidt aan dat het product niet verwijderd mag worden als gewoon huishoudelijk afval. Dit is een product voor industrieel gebruik, wat betekent dat het ook niet afgeleverd mag worden aan afvalcentra voor huishoudelijk afval. Als u dit product wilt verwijderen, gelieve dit op de juiste manier te doen en het naar een nabij gelegen organisatie te brengen gespecialiseerd in de verwijdering van oud elektrisch materiaal.



This symbol indicates that the product which is marked in this way should not be disposed of as normal household waste. As it is a B2B product, it may also not be disposed of at civic disposal centres. If you wish to dispose of this product, please do so properly by taking it to an organisation specialising in the disposal of old electrical equipment near you.



Този знак означава, че продуктът, обозначен по този начин, не трябва да се изхвърля като битов отпадък. Тъй като е B2B продукт, не бива да се изхвърля и в градски пунктове за отпадъци. Ако желаете да извърлите продукта, го занесете в пункт, специализиран в изхвърлянето на старо електрическо оборудване.



Dette symbol viser, at det produkt, der er markeret på denne måde, ikke må kasseres som almindeligt husholdningsaffald. Eftersom det er et B2B produkt, må det heller ikke bortsættes på offentlige genbrugsstationer. Skal dette produkt kasseres, skal det gøres ordentligt ved at bringe det til en nærliggende organisation, der er specialiseret i at bortsætte gammelt el-udstyr.



Sellise sümboliga tähistatud toodet ei tohi käidelda tavalse olmejäätmena. Kuna tegemist on B2B-klassi kuuluvaa tootega, siis ei tohi seda viia kohalikku jäätmekeitluspunkti. Kui soovite selle toote ära visata, siis viige see lähimassee vanade elektriseadmete käitlusele spetsialiseerunud ettevõttesse.



Tällä merkinnällä ilmoitetaan, että kyseisellä merkinnällä varustettua tuotetta ei saa hävittää tavallisen kotitalousjätteen seassa. Koska kyseessä on yritysten välisen kaupan tuote, sitä ei saa myöskään viedä kuluttajien käytöön tarkoitetuuihin keräyspisteisiin. Jos haluatte hävittää tämän tuotteen, ottakaa yhteys lähipäänn vanhojen sähkölaiteiden hävitämiseen erikoistuneeseen organisaatioon.



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Cuireann an siombail seo in iúl nár cheart an táirgeadh atá marcáilte sa tslí seo a dhiúscairt sa chóras fuioll teaghlach. Os rud é gur táirgeadh ghnó le gnó (B2B) é, ní féidir é a dhiúscairt a oiread in ionaid dhiúscartha phobail. Más mian leat an táirgeadh seo a dhiúscairt, déan é a thóigál ag eagraíocht gar duit a sainfhealdhíonn in ndiúscairt sean-fhearsa leictriugh.



Dieses Symbol zeigt an, dass das damit gekennzeichnete Produkt nicht als normaler Haushaltsabfall entsorgt werden soll. Da es sich um ein B2B-Gerät handelt, darf es auch nicht bei kommunalen Wertstoffhöfen abgegeben werden. Wenn Sie dieses Gerät entsorgen möchten, bringen Sie es bitte sachgemäß zu einem Entsorger für Elektroaltgeräte in Ihrer Nähe.



Autό το σύμβολο υποδεικνύει ότι το προϊόν που φέρει τη σήμανση αυτή δεν πρέπει να απορρίπτεται μαζί με τα οικιακά απορρίματα. Καθώς πρόκειται για προϊόν B2B, δεν πρέπει να απορρίπτεται σε άμερτη αρπαγή απόρριψης. Εάν θέλετε να απορρίψετε το προϊόν αυτό, παρακαλούμε όπως να το παραδώσετε σε μία υπηρεσία συλλογής ηλεκτρικού εξοπλισμού της περιοχής σας.



Ez a jelzés azt jelenti, hogy az ilyen jelzéssel ellátott terméket tilos a háztartási hulladékossal együtt kidobni. Mivel ez vállalati felhasználású termék, tilos a lakosság számára fenntartott hulladékgyűjtőkbe dobni. Ha a terméket ki szeretné dobni, akkor vigye azt el a lakóhelyéhez közel működő, elhasznált elektromos berendezések begyűjtésével foglakozó hulladékkezelő központhoz.



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Šī zīme norāda, ka iztrādājumu, uz kura tā atrodas, nedrīkst izmest kopā ar parastiem mājsaimniecības atkritumiem. Tā kā tas ir izstrādājums, ko cits citam pārdod un lieto tikai uzņēmumi, tad to nedrīkst arī izmest atkritumos tādās izgāztuvēs un atkritumu savāktuvēs, kas paredzētas vietējiem iedzīvotājiem. Ja būs vajadzīgs šo izstrādājumu izmest atkritumos, tad rīkojieties pēc noteikumiem un nogādājiet to tuvākajā vietā, kur tās nodarbojas ar vecu elektrisku ierīču savākšanu.



Šis simbols rodo, kad juo paženklinto gaminio negalima išmesti kaip paprastu būtinių atliekų. Kadangi tai B2B (verslas versliu) produktas, jo negalima atiduoti ir būtinių atliekų tvarkymo įmonėms. Jei norite išmesti šį gaminį, atlikite tai tinkamai, atiduodam jį arti jūsų esančiai specializuotai senos elektrinės įrangos utilizavimo organizacijai.



Dan is-simbolu jindika li il-prodott li huwa mmarkat b'dan il-mod m'ghandux jintrema bhal skart normali tad-djar. Minhabba li huwa prodd B2B, ma jistax jintrema wkoll f'centri ciiviċi għar-riġi ta' l-iskart. Jekk tkun tiegħie tarmi dan il-prodott, jekk jogħġib għamel kif suppost billi tieħdu għand organizzazzjoni fil-qrib li tispeċjalizza fir-riġi ta' tagħmir qadim ta' l-elettriku.



Dette symbolet indikerer at produktet som er merket på denne måten ikke skal kastes som vanlig husholdningsavfall. Siden dette er et bedrifterprodukt, kan det heller ikke kastes ved en vanlig miljøstasjon. Hvis du ønsker å kaste dette produktet, er den riktige måten å gi det til en organisasjon i nærheten som spesialiserer seg på kassering av gammelt elektrisk utstyr.



Ten symbol označza, że produktu nim opatrzonego nie należy usuwać z typowymi odpadami z gospodarstwa domowego. Jest to produkt typu B2B, nie należy go więc przekazywać na komunalne składowiska odpadów. Aby we właściwy sposób usunąć ten produkt, należy przekazać go do najbliższej placówki specjalizującej się w usuwaniu starych urządzeń elektrycznych.



Este símbolo indica que o produto com esta marcação não deve ser deitado fora juntamente com o lixo doméstico normal. Como se trata de um produto B2B, também não pode ser deitado fora em centros cívicos de recolha de lixo. Se quiser desfazer-se deste produto, faça-o correctamente entregando-o a uma organização especializada na eliminação de equipamento eléctrico antigo, próxima de si.



Acest simbol indică faptul că produsul marcat în acest fel nu trebuie aruncat ca și un gunoi menajer obișnuit. Deoarece acesta este un produs B2B, el nu trebuie aruncat nici la centrele de colectare urbane. Dacă vreți să aruncați acest produs, vă rugăm să faceți într-un mod adecvat, ducându-l la cea mai apropiată firmă specializată în colectarea echipamentelor electrice uzurate.



Tento symbol znamená, že takto označený výrobok sa nesmie likvidovať ako bežný komunálny odpad. Keďže sa jedná o výrobok triedy B2B, nesmie sa likvidovať ani na mestských skládkach odpadu. Ak chcete tento výrobok likvidovať, odneste ho do najbližšej organizácie, ktorá sa špecializuje na likvidáciu starých elektrických zariadení.



Ta simbol pomení, da izdelka, ki je z njim označen, ne smete zavreči kot običajne gospodinjske odpadke. Ker je to izdelek, namenjen za druge proizvajalce, ga ni dovoljeno odlažati v centri za civilno odlažanje odpadkov. Če želite izdelek zavreči, prosimo, da to storite v skladu s predpisi, tako da ga odpeljete v bližnjo organizacijo, ki je specializirana za odlaganje stare električne opreme.



Este símbolo indica que el producto así señalizado no debe desecharse como los residuos domésticos normales. Dado que es un producto de consumo profesional, tampoco debe llevarse a centros de recogida selectiva municipales. Si desea desechar este producto, hágallo debidamente acudiendo a una organización de su zona que esté especializada en el tratamiento de residuos de aparatos eléctricos usados.



Den här symbolen indikerar att produkten inte får blandas med normalt hushållsavfall då den är förbrukad. Eftersom produkten är en så kallad B2B-produkt är den inte avsedd för privat konsumtion, den får således inte avfallshanteras på allmänna miljö- eller återvinningsstationer då den är förbrukad. Om ni vill avfallshantera den här produkten på rätt sätt, ska ni lämna den till myndighet eller företag, specialiserad på avfallshantering för förbrukad elektrisk utrustning i ert närområde.