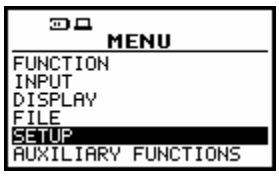
8 SETUP MENU - SETUP

The **SETUP** (*path: MENU / SETUP*) list contains different windows and positions. Some of them are directly related with sound measurements, some of them depend on the mode of the instrument (sound or vibration meter) and some are related with the settings of the instrument's hardware components. In order to open the **SETUP** list the user has to:

- press the **<Menu>** push-button,
- select from the main list, using the **<▲>**, **<▼>** (or **<◀>**, **<▶>**) push-buttons, the **SETUP** text (highlight it inversely),
- press the **<ENTER>** push-button.



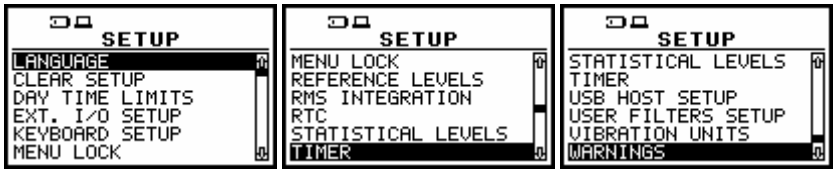
Main list with SETUP text highlighted (displayed inversely)

In the **SETUP** list the following items are available:

LANGUAGE	it enables the user to set language of the user interface;
CLEAR SETUP	it enables the user to return to the producer's set-up, except the coefficients set in the **USER FILTERS**;
DAY TIME LIMITS	it enables the user to select the hours limiting day and night for the calculation of the **Lden** result;
EXT. I/O SETUP	it enables one to connect meter with other device;
KEYBOARD SETUP	it enables the user to set the operating mode of the **<Shift>** and **<Start / Stop>** push-buttons and to switch on the **KEYLOCK**;
MENU LOCK	it enables the user to lock the menu;
REFERENCE LEVELS	it enables the user to select the reference level for the vibration measurements and it informs the user about the reference level in the sound measurements;
RMS INTEGRATION	it enables the user to select the way of integration for the **RMS** measurement in the case of vibration meter or the **LEQ** measurement in the case of sound level meter;
RTC	it enables the user to set the Real Time Clock;
STATISTICAL LEVELS	window available only in the sound meter mode. It enables the user to select ten statistics results to be saved in a file together with the main results (cf. the description of the files in App. B). This position is taken off from the menu in the vibration meter mode;
TIMER	it enables the user to set the Timer function;
USB HOST SETUP	it enables the user to select the functionality of the **USB Host** port;
USER FILTERS SETUP	it enables the user to select, switch on or off and set the correcting values for all 1/1 and 1/3 octave filters in the case of sound measurements; in the case of vibration measurements the weighting filters are always switched on, the user can set the correcting coefficients;
VIBRATION UNITS	it enables the user to select the vibration units in which the results of the measurements are to be given;
WARNINGS	it enables the user to switch on or off the warnings, which can be displayed during the operation of the instrument.

Pressing the **<Shift>** and **<▲>** (or **<Shift>** and **<◀>**) push-buttons results in a movement to the first position of the opened list and pressing the **<Shift>** and **<▼>** (or **<Shift>** and **<▶>**) – results in a movement to the last position of the opened list.

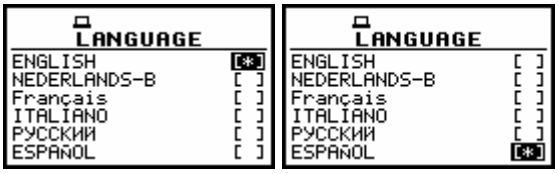
In each available position any change is performed by means of the **<◀>**, **<▶>** push-buttons. In order to confirm the selection the **<ENTER>** push-button has to be pressed. After this confirmation the opened window or list is closed. In order to ignore any changes made in the opened window or list the user has to press the **<ESC>** push-button.



Displays with SETUP list

8.1 Setting the language of the user interface - LANGUAGE

The **LANGUAGE** enables one to select the language of the user interface. In order to enter the list one has to press the **<ENTER>** push-button on the inversely displayed **LANGUAGE** text of the **SETUP** list. The selection is made by placing a special character by means of the **<▲>**, **<▼>**, **<◀>**, **<▶>** push-buttons in the line with the selected language. Pressing the **<Shift>** and **<▲>** (or **<Shift>** and **<◀>**) push-buttons results in a movement to the first position of the opened list and pressing the **<Shift>** and **<▼>** (or **<Shift>** and **<▶>**) – results in a movement to the last position of the opened list. The selection is confirmed and the list is closed after pressing the **<ENTER>** push-button. The list is closed without any confirmation after pressing the **<ESC>** push-button.



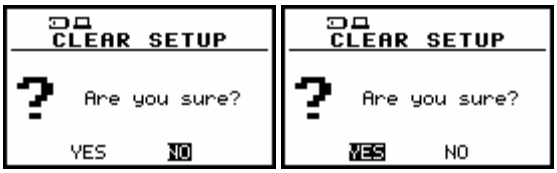
Displays with LANGUAGE list

8.2 Return to the factory made settings - CLEAR SETUP

The **CLEAR SETUP** *(path: MENU / SETUP / CLEAR SETUP)* enables the user to return to the producer's set-up of the instrument. In order to enter the window the user has to select the **CLEAR SETUP** text in the **SETUP** list, using the **<▲>**, **<▼>** (or **<◀>**, **<▶>**) push-buttons and press the **<ENTER>**. After entering this position, the request for the confirmation is displayed. The position is closed without any action and the instrument returns to the **SETUP** list after pressing the **<ESC>** push-button.

SETUP list with CLEAR SETUP text highlighted (displayed inversely)

After entering the window, the request for the confirmation is displayed. The proper answer for the request is selected by means of the **<◄>**, **<►>** push-buttons. The instrument returns to the default set-up after pressing the **<ENTER>** push-button in the case when the answer **YES** was chosen.



Displays with the request for the confirmation for CLEAR SETUP execution

During the clearing process, the message **"CLEARING SETUP"** is displayed. The **SETUP CLEARED** message is displayed after the return to the default settings and the instrument waits for the user's reaction.

Display after the execution of CLEAR SETUP function

The window is closed and the instrument returns to the **SETUP** list after pressing any push-button with an exception of the **<Shift>** and **<Alt>**.

8.3 Day time limits selection - DAY TIME LIMITS

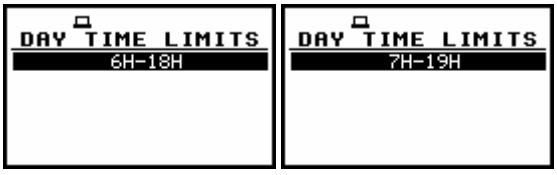
The **DAY TIME LIMITS** enables the user to select the required by the local standards determination of the day and night. These limits are used for the calculation of the **Lden** function (cf. App. D for the definition).

In order to enter the window the user has to select the **DAY TIME LIMITS** text in the **SETUP** list, using the **<▲>**, **<▼>** (or **<◄>**, **<►>**) push-buttons and press the **<ENTER>**.

SETUP list with DAY TIME LIMITS text highlighted (displayed inversely)

Two options are available: **6H–18H** and **7H–19H**. The required limits can be selected by means of the **<◄>**, **<►>** push-buttons.

The window is closed and the instrument returns to the **SETUP** list after pressing the **<ENTER>** (with the confirmation of a change made in the position) or **<ESC>** push-button (ignoring any change made there).



Displays with the available DAY TIME LIMITS

8.4 Selection of the extended mode - EXT. I/O SETUP

The **EXT. I/O SETUP** *(path: MENU / SETUP / EXT. I/O SETUP)* enables the user to select the output or input device. The additional output socket, called **EXT I/O**, **enables one to connect meter with another device**. On this socket, the signal from the input or output of the analogue / digital converter (before the correction) is available. This signal can be registered using the magnetic recorder, can be observed on the oscilloscope or can be used for triggering measurements. It is possible to select three different modes: **ANALOG**, **DIGITAL IN** and **DIGITAL OUT**.

This position enables the user to set the proper parameters of the extended I/O output. In order to enter the window the user has to select the **EXT. I/O SETUP** text in the **SETUP** list, using the **<▲>**, **<▼>** (or **<◀>**, **<▶>**) push-buttons, and press the **<ENTER>**.

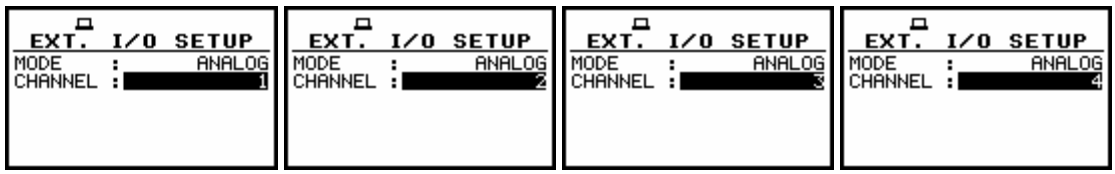
SETUP list in sound measurements with EXT. I/O SETUP text highlighted (displayed inversely)

In the **MODE** position of **EXT. I/O SETUP** window three options are available: **ANALOG**, **DIGITAL IN** and **DIGITAL OUT**. In order to select the proper mode the user has to press the **<◀>**, **<▶>** push-buttons. The window is closed and the instrument returns to the **SETUP** list after pressing the **<ENTER>** (with the confirmation of a change made in the window) or **<ESC>** push-button (ignoring a change made there).

EXT. I/O SETUP windows with the different I/O devices selection

In the **ANALOG** mode, the meter can send signals to the output device. For example, the signal can be observed on the oscilloscope from the selected **CHANNEL**. The user has the opportunity to choose between **CHANNEL 1**, **2**, **3** and **4**.

The selected channel is being connected to the extended I/O port. In order to enter this position the user has to select the **CHANNEL** text in the **EXT. I/O SETUP** list, using the **<▲>**, **<▼>** push-buttons. After selection of the **CHANNEL** the user has to press the **<◀>**, **<▶>** push-buttons. The window is closed and the instrument returns to the **SETUP** list after pressing the **<ENTER>** (with the confirmation of a change made in the window) or **<ESC>** push-button (ignoring a change made there).



EXT. I/O SETUP windows with the channel selection for output signal

In the **DIGITAL IN** mode the meter is connected to the output device, which triggers it. The measurements are started, when on this input there is a triggering impulse. In this mode the instrument works in **EXT.TRIGGER** function.

In the **DIGITAL OUT** mode the meter is connected to the output device, which has to be triggered. In this mode the instrument works in **TRIGGER PULSE** function. It is especially useful in the multi-channel, simultaneous, synchronised measurements.

8.5 Selection of few push-buttons modes - KEYBOARD SETUP

The **KEYBOARD SETUP** *(path: MENU / SETUP / KEYBOARD SETUP)* enables one to programme the operation mode of the **<Shift>**, **<Start / Stop>** push-buttons and to set the **KEYLOCK** option.

SETUP list with KEYBOARD SETUP text highlighted (displayed inversely)

In order to enter the window the user has to select the **KEYBOARD SETUP** text in the **SETUP** list, using the **<▲>**, **<▼>** (or **<◀>**, **<▶>**) push-buttons and press the **<ENTER>**. The selection of a parameter in all positions is done by means of the **<◀>**, **<▶>** push-buttons and confirmed by the **<ENTER>** one.

8.5.1 Selection of the working mode of <Shift> / <Alt> push-buttons - SHIFT MODE

In the **SHIFT** the user can choose between **Shift** and **2nd Fun.** When the **Shift** text is selected, the push-button with this name operates as in the keyboard of a computer – in order to achieve the desired result the second push-button has to be pushed in conjunction with the **<Shift>** or **<Alt>**.

When the **2nd Fun.** text is selected the **<Shift>** push-button operates in the sequence with the other one. This mode is additionally signalled by the flashing **"Arrows"** icon on the top of the display which appears after pressing **<Shift>** or **<Alt>** push-button in this mode and is flashing until any other push-button with double meaning is pressed.

In order to select a desired mode of the **<Shift>** push-button the **<◀>**, **<▶>** should be pressed. In order to confirm the selection the **<ENTER>** push-button has to be pressed. Such pressing closes the window. After pressing the **<ESC>** push-button the window is also closed but all changes, which were made, are ignored.

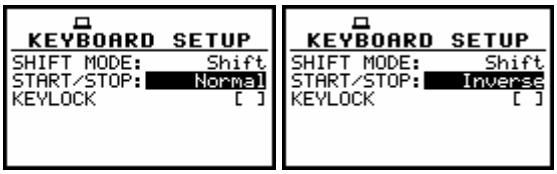
KEYBOARD SETUP windows with the available settings in SHIFT MODE

8.5.2 Selection of the working mode of <Start / Stop> push-button - START/STOP

In the **START/STOP** *(path: MENU / SETUP / KEYBOARD SETUP)* the user can choose between **Normal** and **Inverse**. When the **Normal** text is selected the **<Start / Stop>** push-button operates as it is described in Chapter 2 – the instrument reacts on each of its pressing, starting or stopping the measurements.

When the **Inverse** text is selected, the **<Start / Stop>** push-button operates in conjunction or **in a sequence with the <Shift> one. The measurements are started or stopped after pressing both** push-buttons.

In order to select a desired mode of the **<Start / Stop>** push-button the **<◀>**, **<▶>** should be pressed. In order to confirm the selection the **<ENTER>** push-button has to be pressed. Such pressing closes the window. After pressing the **<ESC>** push-button the window is also closed but all changes, which were made, are ignored.



KEYBOARD SETUP windows with the available settings in START/STOP

8.5.3 Locking the keyboard - KEYLOCK

The **KEYLOCK** is switched on after placing the special character (**[√]**) in the inversely displayed position in the line with the **KEYLOCK** text. In order to confirm the selection the **<ENTER>** push-button has to be pressed. Such pressing closes the window. After pressing the **<ESC>** push-button the window is also closed but all changes, which were made, are ignored.

KEYBOARD SETUP window with the activation of KEYLOCK option

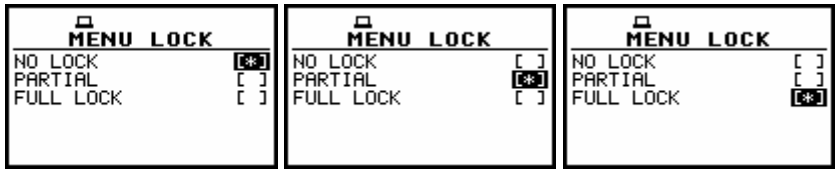
8.6 Locking the MENU- MENU LOCK

The **MENU LOCK** (*path: MENU* / *SETUP* / *MENU LOCK*) enables the user to lock **MENU** partially or fully. In order to enter the window, the user has to select the **MENU LOCK** text in the **SETUP** list, using the **<▲>**, **<▼>** (or **<◄>**, **<►>**) push-buttons and press the **<ENTER>**.

SETUP list with MENU LOCK text highlighted (displayed inversely)

In this window, three options are available **NO LOCK**, **PARTIAL** and **FULL LOCK**. In the case of default **NO LOCK** option all available positions in the menu are accessible due to the settings which were made. The activation of **PARTIAL** results in locking access to the **MENU** options, which are responsible for measurement parameters. In the case of **FULL LOCK** no one position from the **MENU** lists is accessible and after attempt of enter **MENU** the **MENU LOCK** window appears on the display. The **MENU** is available after unlocking it.

In order to activate the required option the user has to place, by means of the **<◄>**, **<►>** push-buttons, the special character **[*]** in the proper position. In order to confirm the selection, the **<ENTER>** push-button has to be pressed. Such pressing closes the window. After pressing the **<ESC>** push-button the window is also closed but all changes, which were made, are ignored.



MENU LOCK windows with available options

8.7 Setting the reference signal in vibration measurements - REFERENCE LEVELS

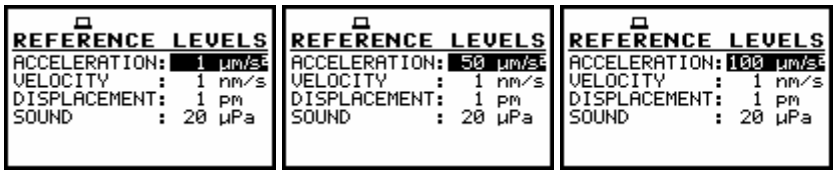
The **REFERENCE LEVELS** (*path: MENU / SETUP / REFERENCE LEVELS*) enables the user to set the reference level of the signal in vibration or sound measurements. The values, which are set here, are taken into account during the calculations of the measurement results expressed in the logarithmic scale (with the dB as the units).

In order to enter the window the user has to select the **REFERENCE LEVELS** text in the **SETUP** list, using the **<▲>**, **<▼>** (or **<◀>**, **<▶>**) push-buttons and press the **<ENTER>**. The selection of a parameter which level has to be set is done by means of the **<▲>**, **<▼>** push-buttons.

SETUP list with REFERENCE LEVELS text highlighted (displayed inversely)

8.7.1 Setting the reference level of the acceleration signal - ACC

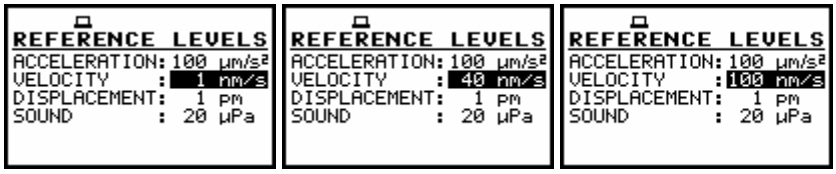
In the **ACC**, the user can set the reference level of the acceleration signal. It is possible to set the level from 1 μms^{-2} to 100 μms^{-2} with 1 μms^{-2} step pressing the **<◀>**, **<▶>** push-buttons. The step can be increased to 10 μms^{-2} pressing the **<Shift>** with the **<◀>**, **<▶>** push-buttons. In order to confirm the setting the **<ENTER>** push-button has to be pressed. Such pressing closes the window. After pressing the **<ESC>** push-button the window is also closed but all changes, which were made, are ignored.



REFERENCE LEVELS windows with the reference level setting of acceleration signal

8.7.2 Setting the reference level of the velocity signal - VEL

In the **VEL**, the user can set the reference level of the velocity signal. It is possible to set the level from 1 nms^{-1} to 100 nms^{-1} with 1 nms^{-1} step pressing the **<◀>**, **<▶>** push-buttons. The step can be increased to 10 nms^{-1} pressing the **<Shift>** with the **<◀>**, **<▶>** push-buttons. In order to confirm the setting the **<ENTER>** push-button has to be pressed. Such pressing closes the window. After pressing the **<ESC>** push-button the window is also closed but all changes, which were made, are ignored.

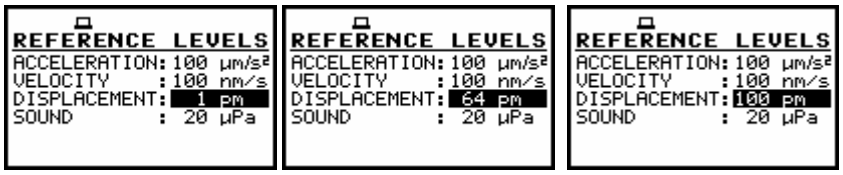


REFERENCE LEVELS windows with the reference level setting of velocity signal

8.7.3 Setting the reference level of the displacement signal - DIL

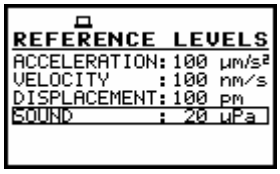
In the **DIL**, the user can set the reference level of the displacement signal. It is possible to set the level from 1 pm to 100 pm with 1 pm step pressing the **<◀>**, **<▶>** push-buttons. The step can be increased to 10 pm pressing the **<Shift>** with the **<◀>**, **<▶>** push-buttons. In order to confirm the setting

the **<ENTER>** push-button has to be pressed. Such pressing closes the window. After pressing the **<ESC>** push-button the window is also closed but all changes, which were made, are ignored.



REFERENCE LEVELS windows with the reference level setting of displacement signal

In the case of sound measurements the **REFERENCE LEVELS** window is used only to inform the user that the reference level of the acoustic signal is equal to 20 µPa. After pressing the **<ESC>** or **<ENTER>** push-buttons the window is closed.



REFERENCE LEVELS window with the reference level of the acoustic signal

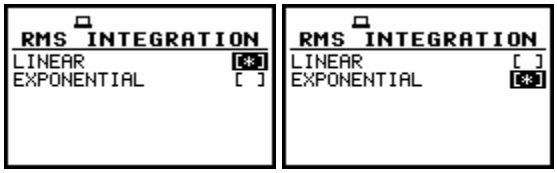
8.8 Selection of detector's type in the LEQ (RMS) calculations - RMS INTEGRATION

The **RMS INTEGRATION** (*path: MENU / SETUP / RMS INTEGRATION*) enables the user to select the detector type for the calculations of the **LEQ** function (in the case of sound measurements) or the **RMS** function (in the case of vibration measurements). In order to enter the window the user has to select the **RMS INTEGRATION** text in the **SETUP** list, using the **<▲>**, **<▼>** (or **<◀>**, **<▶>**) push-buttons and press the **<ENTER>**.

SETUP list with RMS INTEGRATION text highlighted (displayed inversely)

Two options are available: **LINEAR** and **EXPONENTIAL**. The required parameter can be selected by means of the **<◀>**, **<▶>** push-buttons. The window is closed and the instrument returns to the **SETUP** list after pressing the **<ENTER>** (with the confirmation of a change made in the window) or the **<ESC>** push-button (ignoring a change made there).

The expressions used for the **LEQ** or **RMS** calculations are given in Appendix D. When this option is selected in the case of sound measurements, the value of the **LEQ** and **SEL** function does not depend on the detector time constant (the results are displayed **without** the indicator of the detectors selected in the profiles).

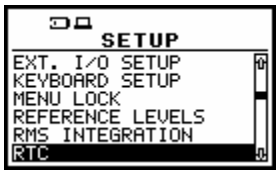


Displays with the available options of RMS INTEGRATION

When the **EXPONENTIAL** option is selected in the case of sound measurements, the value of the **LEQ** and **SEL** function depends on the detector time constant (the results are displayed **with** the indicator of the detectors selected in the profiles).

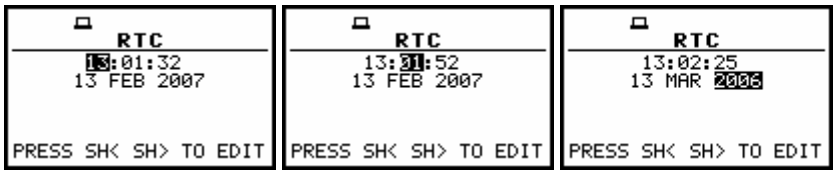
8.9 Programming of the instrument's internal Real Time Clock - RTC

The **RTC** (*path: MENU / SETUP / RTC*) enables one to programme the internal **Real Time Clock**. This clock is displayed in the top right corner of the instrument's display. In order to enter the window the user has to select the **RTC** text in the **SETUP** list, using the **<▲>**, **<▼>** (or **<◀>**, **<▶>**) push-buttons and press the **<ENTER>**.



SETUP list with RTC text highlighted (displayed inversely)

The operation of the **RTC** setting is performed in the same way as it was described in the case of the **FILE NAME** window. The selection of the setting parameter is performed using the **<◀>**, **<▶>** push-buttons and the change of its value – using the **<▲>**, **<▼>** push-buttons. The parameter, which value has to be changed, is flashing.



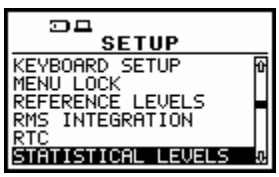
RTC window

Notice: *The new value of a parameter is confirmed after each pressing of the* **<▲>**, **<▼>** *(new value is selected without any confirmation from the* ***<ENTER>*** *push-button).*

The window is closed and the instrument returns to the **SETUP** list after pressing the **<ENTER>** or **<ESC>** push-button.

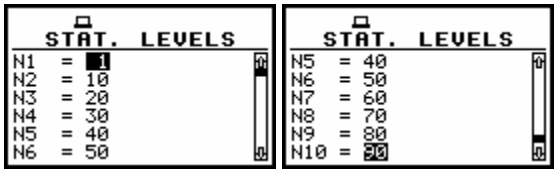
8.10 Selection of statistics levels to be saved in a file - STATISTICAL LEVELS

The **STATISTICAL LEVELS** (*path: MENU / SETUP / STATISTICAL LEVELS*) enables the user to select ten statistics from one hundred calculated in the instrument to be saved in a file together with the main results of the measurements.



SETUP list with STATISTICAL LEVELS text highlighted (displayed inversely)

In order to enter the window, the user has to select the **STATISTICAL LEVELS** text in the **SETUP** list, using the **<▲>**, **<▼>** (or **<◀>**, **<▶>**) push-buttons and press the **<ENTER>** one.

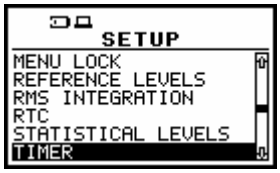


STATISTICAL LEVELS windows

The selection of the position in the window (the proper **Ni**, where i = 1,…, 10) is performed by means of the **<▲>**, **<▼>** push-buttons. The selection of a number from 1 to 99 in all ten **Ni** positions is done by means of the **<◀>**, **<▶>** push-buttons (with the step equal to 1) or by means of the **<◀>**, **<▶>** push-buttons together with the **<Shift>** one (with the step equal to 10). The window is closed and the instrument returns to the **SETUP** list after pressing the **<ENTER>** (with the confirmation of all settings made in the window) or **<ESC>** push-button (ignoring all settings made there).

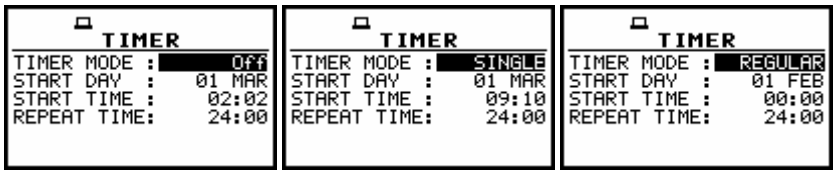
8.11 Programming of the instrument's internal timer - TIMER

The **TIMER** (*path: MENU / SETUP / TIMER*) enables one to programme the internal timer. The instrument can be switched on by itself in the programmed time and can perform the measurements using the set-up, which was used before its switching off. In order to enter the window the user has to select the **TIMER** text in the **SETUP** list (using the **<▲>** or **<◀>** push-buttons) and press the **<ENTER>**.



SETUP list with TIMER text highlighted (displayed inversely)

The operation of the **TIMER** (*path: MENU / SETUP / TIMER*) setting is performed using the **<◀>**, **<▶>** push-buttons and the change of its value – using the **<◀>**, **<▶>** push-buttons pressed together with the **<Shift>**.



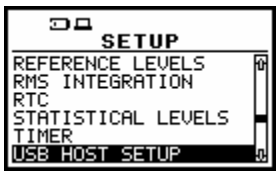
TIMER window

Notice: *The new value of a parameter is confirmed after each pressing of the* **<◀>** *or* **<▶>** *together with the* **<Shift>** *push-buttons (new value is selected without any confirmation from the* **<ENTER>** *push-button).*

The window is closed and the instrument returns to the **SETUP** list after pressing the **<ENTER>** or **<ESC>** push-button.

8.12 Selection the USB–HOST port functionality - USB–HOST PORT

The **USB–HOST PORT** enables one to programme the functionality of the instrument's socket named **USB Host**. This function is under development.



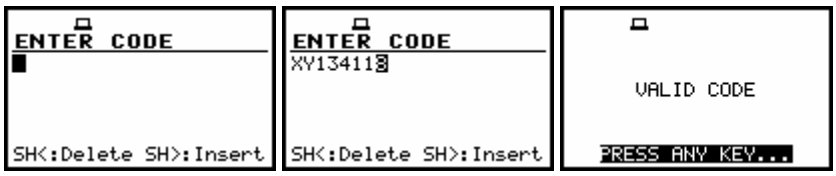
SETUP list with USB–HOST PORT text highlighted (displayed inversely)

The socket **USB Host** can be used to serve as the input of the different interfaces: **RS 232** or **USB**. The **RS 232** interface in the **SVAN 95x** instrument is available as a hardware option (a special interface, named as the **SV 55**, with a dedicated microprocessor has to be attached to the socket **USB Host**). An error occurs in the case of the connection to the socket the peripheral device of the different type than the selected one.

In order to enter the window the user has to select the **USB–HOST PORT** text in the **SETUP** list, using the **<▲>**, **<▼>** (or **<◀>**, **<▶>**) push-buttons and press the **<ENTER>** one.

USB–HOST SETUP window

The selection of the socket's functionality is made with the **<▲>**, **<▼>** (or **<◀>**, **<▶>**) push-buttons which move the special character between the available options. The selection is confirmed after pressing the **<ENTER>** push-button which closes the window and returns to the **SETUP** list. The return to this list is also possible after pressing the **<ESC>** push-button but the selection is not confirmed. The USB host interface can be used to control the external USB memory disk (**USB DISK**) with the FAT16 or FAT32 file systems or IrDA (Infra Red Data Association) interface (**USB IrDA**) based on the dedicated circuit STIr4200. The first selection of the USB interface requires the introduction of the activation code (after pressing the **<ENTER>** push-button, the **ENTER CODE** window appears on the display). The next selection does not require any code.



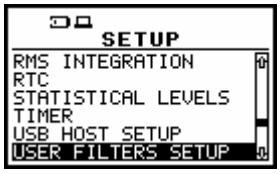
Displays during the activation of USB host's functions

Notice: *The converter **SV 55** serves as the RS 232 interface. The **SV 55** connection to the **USB Host** socket is detected and after successful detection the headphone icon is switched on. The transmission using the **SV 55** is possible only in the case when the instrument is not connected to a PC with the **USB Device** port.*

Notice: *The USB disk connected to the **USB Host** socket switches off the instrument's internal flash memory. All file functions and remote commands are redirected to the USB disk. The internal flash memory is activated after the disconnection between USB disk and the instrument.*

8.13 Introduction the filter coefficients for 1/1 OCTAVE and 1/3 OCTAVE analysis – USER FILTERS SETUP

The **USER FILTERS SETUP** (*path: MENU / SETUP / USER FILTERS*) enable the user to introduce the values of the correcting coefficients taken into account in **1/1 OCTAVE** or **1/3 OCTAVE** analysis. The results of the analysis can be modified by the introduced factors and so calculated **TOTAL** values for one or two active (set to **On**) sets of the filters presented on the display. In order to enter the window the user has to select the **USER FILTERS SETUP** text in the **SETUP** list, using the **<▲>**, **<▼>** (or **<◀>**, **<▶>**) push-buttons and press the **<ENTER>**. The texts which appear after pressing **<ENTER>** depends on the position set in the **MODE** window.



SETUP list with USER FILTERS SETUP text highlighted (displayed inversely)

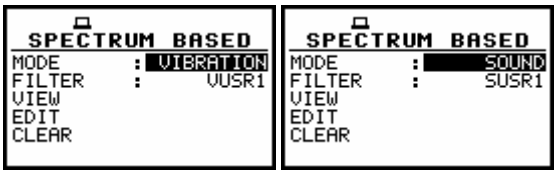
USER FILTERS SETUP

- **MODE**
  - **VIBRATION**
  - **SOUND**
- **FILTER**
  - **VUSR1**, **VUSR2**, **VURS3** in the case of vibration measurements
  - **SUSR1**, **SUSR2**, **SUSR3** in the case of sound measurements

- **VIEW**
  - **0.80 Hz:** available values of 0.8 Hz centre frequency filter: **-INF**,**-100.0dB .. 100.0dB**
  - **1.00 Hz:** available values of 1 Hz centre frequency filter: **-INF**,**-100.0dB .. 100.0dB**
  -
  - **...**
  - **…**
  - **20.0kHz:** available values of 20 kHz centre frequency filter: **-INF**,**-100.0dB .. 100.0dB**
- **EDIT**
  - **0.80 Hz:** available values of 0.8 Hz centre frequency filter: **-INF**, **-100.0dB .. 100.0dB**
  - **1.00 Hz:** available values of 1 Hz centre frequency filter: **-INF**, **-100.0dB .. 100.0dB**
  -
  - **...**
  - **…**
  - **20.0kHz:** available values of 20 kHz centre frequency filter: **-INF**, **-100.0dB .. 100.0dB**
- **CLEAR**
  - **Are you sure?**

8.13.1 Selecting the mode for introduction of user filter coefficients - MODE

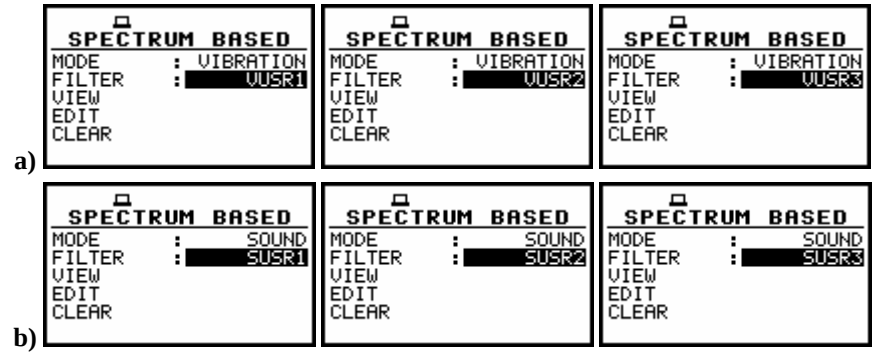
In the **MODE** it is possible to select **VIBRATION** or **SOUND**. The selection is made with **<◄>**, **<►>** push-buttons.



SPECTRUM BASED windows with MODE selection

8.13.2 Selecting the filter to be viewed, edited or cleared - FILTER

In the **FILTER**, there are **VUSR1**, **VUSR2**, **VUSR3** in the case of vibration measurements and **SUSR1**, **SUSR2**, **SUSR3** in the case of sound measurements. The selection of a filter is made with the **<◄>**, **<►>** push-buttons.



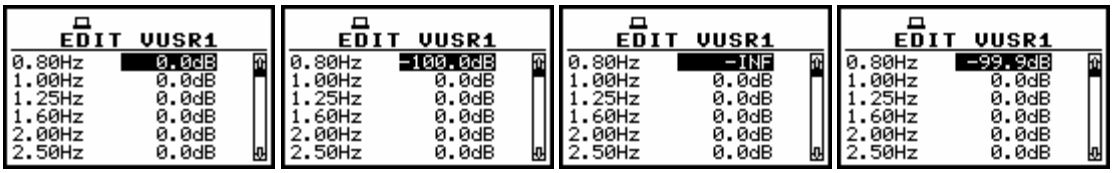
SPECTRUM BASED windows with the filter selection for vibration (a) and for sound (b)

8.13.3 Setting the coefficients of the user filters set - EDIT

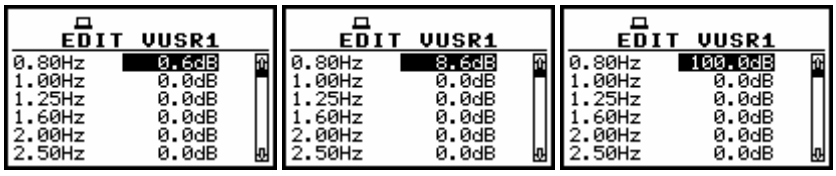
After pressing the **<ENTER>** push-button when the **VUSR1** (in the **EDIT**) text is displayed inversely, the window containing the status of the selected set and the values of the coefficients for all **1/3 OCTAVE** filters is opened. The status position informs the user that the set is switched on. It is not possible to change the status.

SPECTRUM BASED windows with EDIT selected

The selection of the position in the set is performed by means of the **<▲>**, **<▼>** push-buttons. The value is introduced by pressing the **<◄>**, **<►>** push-buttons. The window is closed and the instrument returns to the **USER FILTERS SETUP** window after pressing the **<ENTER>** (with the confirmation of all settings made in the window) or **<ESC>** push-button (ignoring all settings made there).



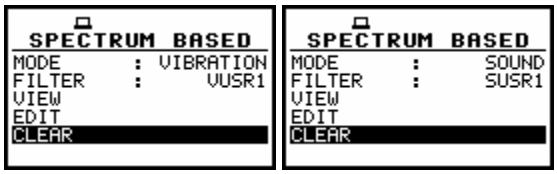
EDIT windows with the setting of the filter's coefficient



EDIT windows with the setting of the filter's coefficient (cont.)

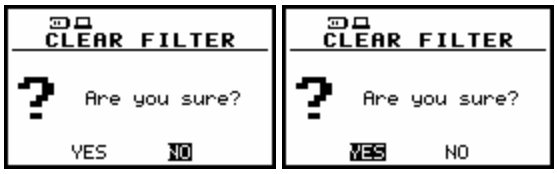
8.13.4 Clearing the coefficients of the user filters - CLEAR

The **CLEAR** enables the user to clear the values of the user coefficients of the selected octave or third octave filter. In order to execute the **CLEAR** operation the user has to highlight the **CLEAR** text and press **<ENTER>**.



SPECTRUM BASED windows with CLEAR selected

The **ARE YOU SURE?** question appears on the display. The coefficients of a set (or sets) are cleared after the selection of **YES** by means of the **<◄>**, **<►>** push-buttons and after pressing the **<ENTER>** one. After clearing the instrument returns to the **SPECTRUM BASED** window.



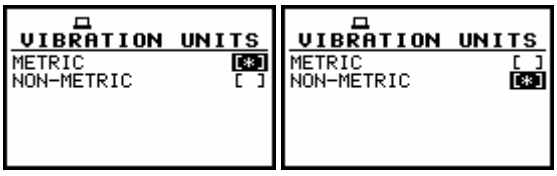
Displays with the request for the confirmation for CLEAR FILTER execution

8.14 Selection of the vibration units - VIBRATION UNITS

The **VIBRATION UNITS** (*path: MENU / SETUP / VIBRATION UNITS*) enables the user to select the units for the vibration measurements. In order to enter the window the user has to select the **VIBRATION UNITS** text in the **SETUP** list, using the **<▲>**, **<▼>** (or **<◄>**, **<►>**) push-buttons and press the **<ENTER>**.

SETUP list with VIBRATION UNITS text highlighted (displayed inversely)

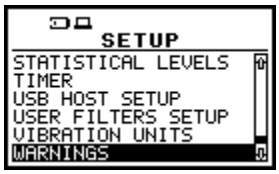
It is possible to select the **METRIC** units (e.g. m/s^2, m/s, m etc.) or **NON-METRIC** units (e.g. g, ips, mil etc.). The selection is done by means of the **<◄>**, **<►>** push-buttons. In order to confirm the selection the **<ENTER>** push-button has to be pressed. Such pressing closes the window. After pressing the **<ESC>** push-button the window is also closed but all changes, which were made, are ignored.



VIBRATION UNITS windows

8.15 Warnings selection - WARNINGS

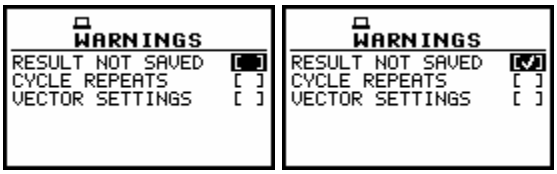
The **WARNINGS** (*path: MENU / SETUP / WARNINGS*) enables the user to select the messages which could be displayed during the operation of the instrument. In order to enter the window the user has to select the **WARNINGS** text in the **SETUP** list, using the **<▲>**, **<▼>** (or **<◄>**, **<►>**) push-buttons and press the **<ENTER>**.



SETUP list with WARNINGS text highlighted (displayed inversely)

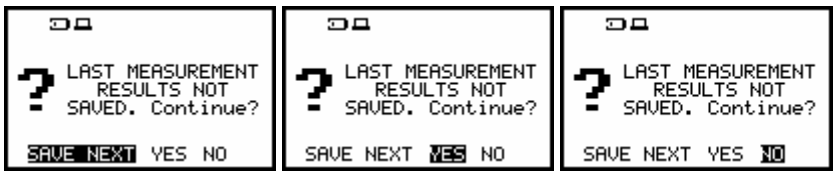
8.15.1 Saving the measurement results in a file - RESULTS NOT SAVED

In order to switch on the displaying of the message the user has to place, by means of the **<◄>**, **<►>** push-buttons, the special character in the warning's position. The window is closed and the instrument returns to the **SETUP** list after pressing the **<ENTER>** (with the confirmation of a change made in the window) or **<ESC>** push-button (ignoring a change made there).



WARNINGS windows with RESULT NOT SAVE selected

When the position is set to be active the special warning can be displayed on the display after pressing the **<Start / Stop>** push-button. It will happen in a case when the result of the previous measurement was not saved in a file of the instrument. The warning, which will appear on the display, is presented below.



Displays with the warning that the previous results were not saved and the confirmation

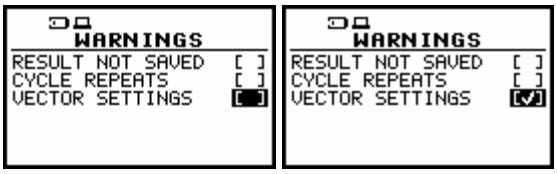
The default value of this position is **SAVE NEXT**. After pressing **<ENTER>** the instrument saves last measurement result. The number of the file is increased by one in the comparison to the last saved file. Using the **<◄>**, **<►>** push-buttons one can change the value of the position to **YES** or **NO**. To confirm the change the **<ENTER>** should be pressed. After the selection of **YES** the instrument returns to the active mode of measurement result's presentation starting the new measurement process.

After the selection of **NO** push-button the instrument returns to the active mode of measurement result's presentation without starting the new measurement process.

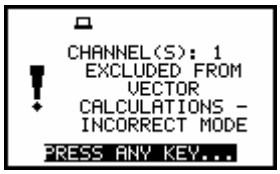
8.15.2 Excluding channel from vector calculations - VECTOR SETTINGS

The **VECTOR SETTINGS** warning appears on the display when the user changes mode of the channel from **VIBRATION** into **SOUND** (*path: MENU / INPUT / CHANNELS SETUP / MODE: VIBRATION ➧SOUND*) and the channel was included to the vector calculations (*path: MENU / INPUT / AUXILIARY SETUP / VECTOR SETUP / CHANNEL x: [√]*).

In order to switch on the displaying of the message the user has to place, by means of the **<➤>**, **<➤>** push-buttons, the special character in the warning's position. The window is closed and the instrument returns to the **SETUP** list after pressing the **<ENTER>** (with the confirmation of a change made in the window) or **<ESC>** push-button (ignoring a change made there).



WARNINGS windows with the selection of VECTOR SETTINGS



Display with the warning that CHANNEL x has been excluded from vector calculation