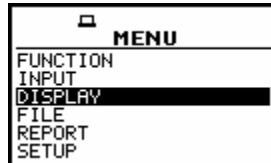


6 DATA AVAILABLE ON THE DISPLAY - DISPLAY

In order to open the **DISPLAY** list the user has to:

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

Pressing the **<SHIFT>** and **<▲>** (or **<SHIFT>** and **<◀>**) 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.



Display in the main list; the **DISPLAY** text highlighted (displayed inversely)

The **DISPLAY** list is used for setting the various parameters, which are mainly dedicated for the control of the display. The following items are present on this list:

- | | |
|----------------------|--|
| DISPLAY MODES | enables one to select the mode of the measurement results presentation; |
| DISPLAY SETUP | enables one to change the scale in the graphical modes of result's presentation and the parameters of the logger's result presentation; |
| LOGGER VIEW | enables one to select and present the results stored in the logger's files; |
| SCREEN SETUP | enables one to set the contrast and the switch on/off the backlight timeout of the instrument's display; |
| BATTERY | it informs the user about the source of powering of the instrument and current power supply voltage; |
| UNIT LABEL | informs the user about the serial number of the instrument, the version of the internal software and the standards to which conform the measurement results. |

In each available position any change is performed by means of the **<◀>**, **<▶>** and **<▼>**, **<▲>** 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.



Display with the **DISPLAY** list

6.1 Selection of the modes of measurement results presentation - **DISPLAY MODES**

The **DISPLAY MODES** sub-list enables one the selection of the currently available modes of displaying the results of measurement. The selection is made by placing or replacing the special character in the inversely displayed position of the **DISPLAY MODES** sub-list by means of the **<◀>**,

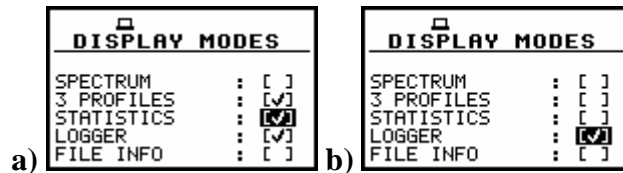
< ▶ > push-buttons. In order to confirm the selection the user has to press the <ENTER> push-button. The mode of the results presentation is related with the selection of the instrument's function (**SLM** or **VLM**, **1/1 OCTAVE**, **1/3 OCTAVE**, **FFT** analyser etc.). Only One Profile mode cannot be switched off independently from the current mode of the instrument.



Notice: The abbreviation **SM** – **Sound Mode** refers to the sound modes (**SOUND METER** and **VOLTAGE (SOUND)**) and the proper functions dedicated for the measurement and analysis of the acoustic signal: **LEVEL METER**, **1/1 OCTAVE**, **1/3 OCTAVE**, **FFT**, **DOSEMETER**, **TONALITY**, **LOUDNESS**, **RT60**, **AEM** and **ENVELOPING**; **VM** – **Vibration Mode** refers to the vibration modes (**VIBRATION METER** and **VOLTAGE (VIBR.)**) and the proper functions dedicated for the measurement and analysis of the vibration signal: **LEVEL METER**, **1/1 OCTAVE**, **1/3 OCTAVE**, **FFT**, **RPM** and **ENVELOPING**.

For the **Sound Level Meter** the following possibilities of the measurement results presentation are available:

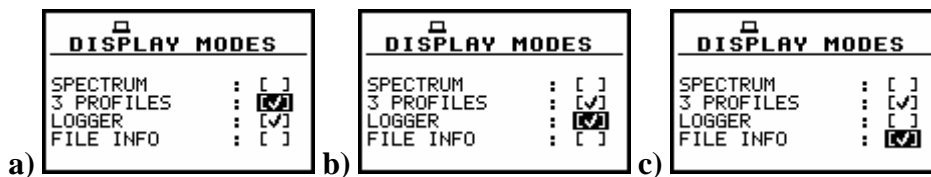
- **One Profile**,
- **3 PROFILES**,
- **STATISTICS**,
- **LOGGER** (time history),
- **FILE INFO**.



DISPLAY MODES windows in SM

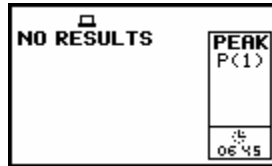
For the **Vibration Level Meter** the following possibilities of the measurement results presentation are available:

- **One Profile**,
- **3 PROFILES**,
- **LOGGER** (time history)
- **FILE INFO**.




DISPLAY MODES windows in VM


The **LOGGER** mode of results presentation is available if, and only if, the data from at least one profile are logged in the logger's file. If the **LOGGER** position is switched on ([✓]) but there was nothing stored in the logger's file (in the selected profile there were **selected results (PEAK, MAX, MIN** or **RMS** in the case of **SM** and **PEAK, P-P, MAX** or **RMS** in the case of **VM**) but the instrument still **waits** for the logger results, i.e. the **LOGGER STEP** is long, the **NO RESULTS** text is displayed. When the **LOGGER** is selected as active and the **LOGGER** positions in all profiles are not selected, the **LOGGER** mode of results presentation is skipped.



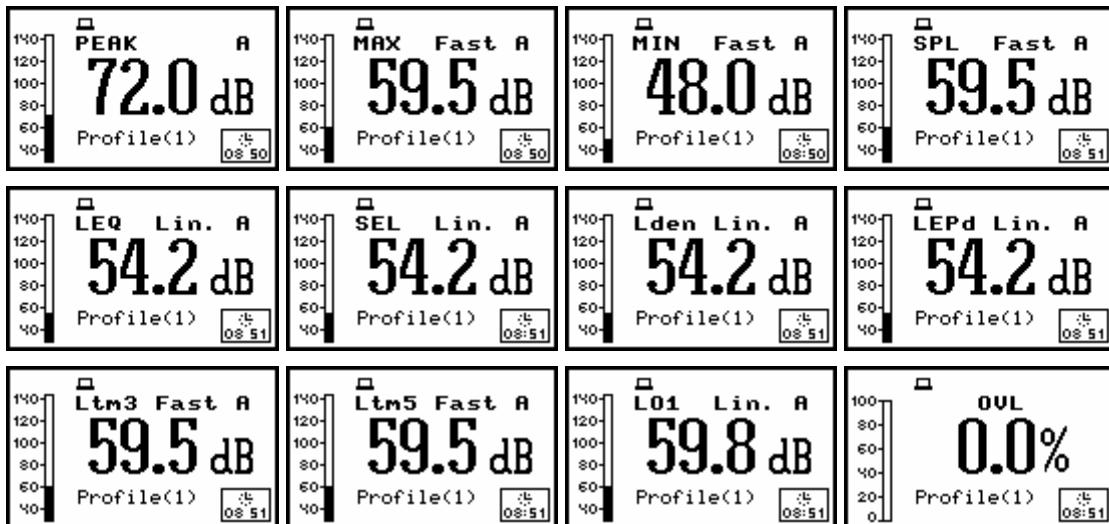
Display in the **LOGGER** mode when there is nothing in the logger to be displayed (after setting **LOGGER** as active)

The display with the measurement result in so-called one profile mode is presented below. On the top of the display (under the icons line) there are the following data: the function name (**SPL**, **LEQ**, **SEL**, **Lden**, **LEPd**, **Ltm3**, **Ltm5**, **Lxx**, **OVL**, **PEAK**, **MAX**, **MIN** in the case of sound measurements or **RMS**, **VDV**, **OVL**, **PEAK**, **P-P**, **MTVV** in the case of vibration measurements), the detector time constant (in **SM** when the detector is exponential: **IMP.**, **FAST**, **SLOW** or **Lin** when the detector is linear and in **VM**: **100 ms**, **125 ms**, .. **10.0 s**, ..).

 **Notice:** In the case of **LINEAR RMS INTEGRATION** (path: **MENU / SETUP / RMS INTEGRATION / LINEAR**) for **LEQ**, **SEL**, **SEL8**, **E**, **E_8h**, **LEPd**, **PSEL** and **Lxx** results on the display appears **Lin.** instead of **IMP.**, **FAST** or **SLOW** detector time constant.

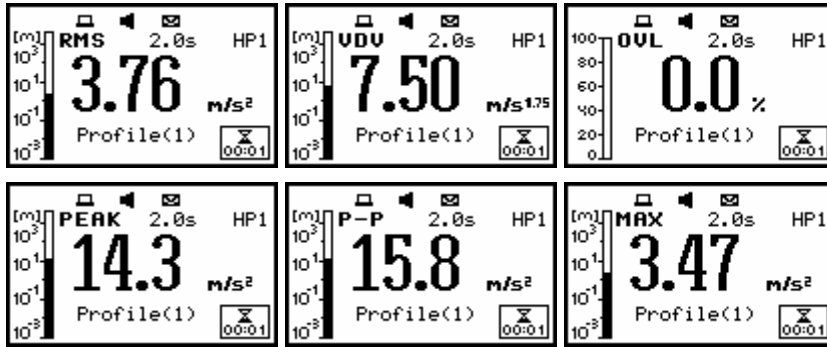
 **Notice:** There is not any indication of the detector in the case of **PEAK** and **OVL** results.

The name of the implemented filter (path: **MENU / INPUT / PROFILE x / FILTER**) is presented as the last element of the first line (**A**, **C**, **Z** in **SM** or **HP1**, **HP3**, **HP10**, **Vel1**, **Vel3**, **Vel10**, **VelMF**, **Dil1**, **Dil3**, **Dil10**, **KB**, **Wk**, **Wd**, **Wc**, **Wj**, **Wm**, **Wh**, **Wg**, **Wb** in **VM**).

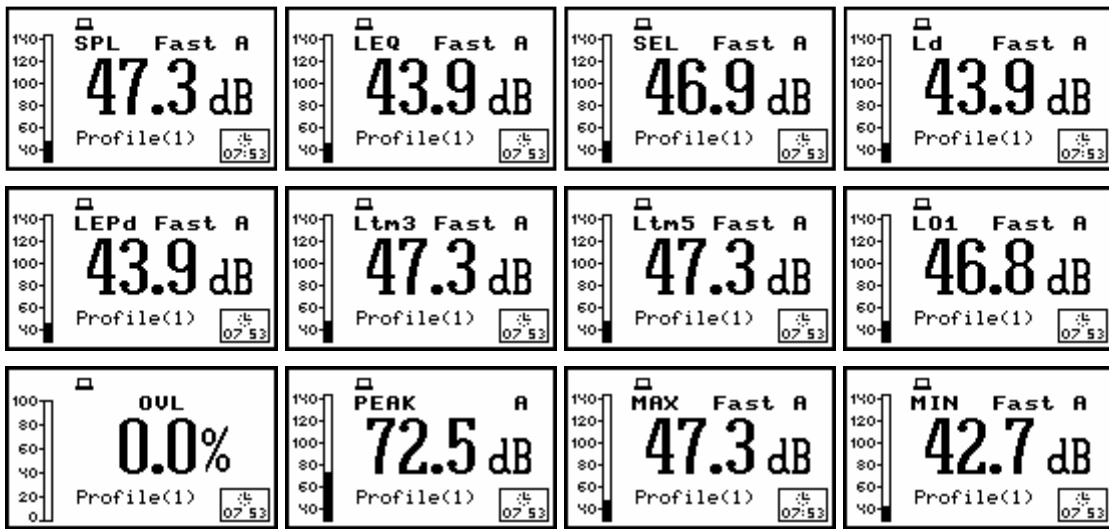


Measurement results in **SM**, made with linear integration, presented in one profile mode

The result of the measurement together with its unit (dB or m/s^2 for almost all results and % only for **OVL**) is given in the second line. The profile, the results are coming from, is visible in the bottom of the display (**Profile(1)**, **Profile(2)** or **Profile(3)**). The vertical line showing the value of the result in the analogue-like form together with the scale is presented at the left side of the display. The real time clock is visible in the bottom right corner of the display. The selection of the result is made pressing the **<◀>**, **<▶>** push-buttons.

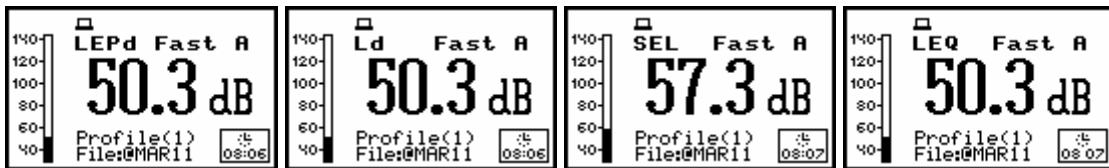


Measurement results in VM presented in one profile mode



Measurement results, made with exponential integration in SM, presented in one profile mode

If the measurement results are saved in the internal memory in a file, its name is presented under the profile's number.

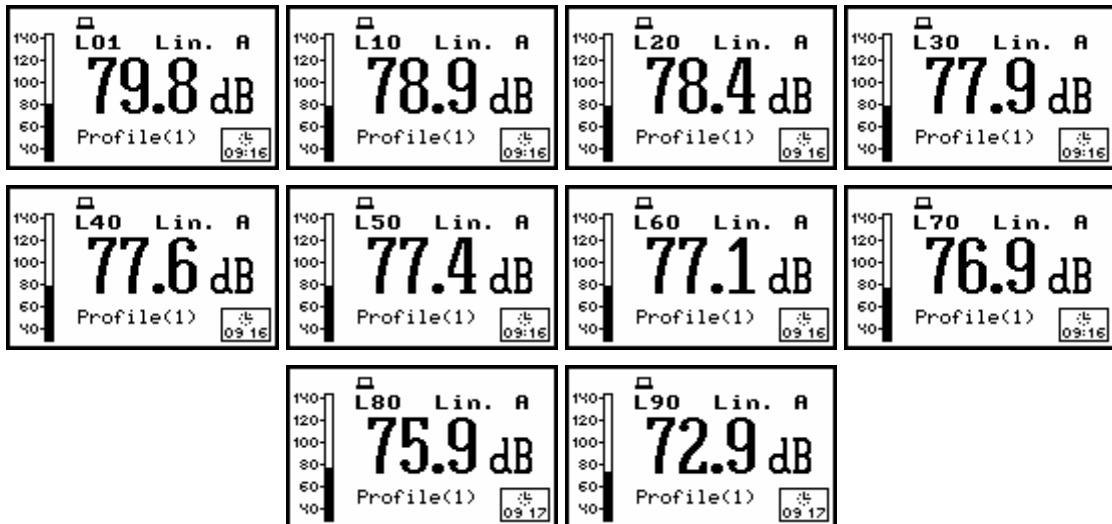


Measurement results, made with exponential integration in SM, saved in the file named MAR11, presented in one profile mode

The profile is changed after pressing the <SHIFT> and <^> or <SHIFT> and <v> push-buttons. The same result can be achieved after pressing the <ALT> and <^> or <ALT> and <v> push-buttons.

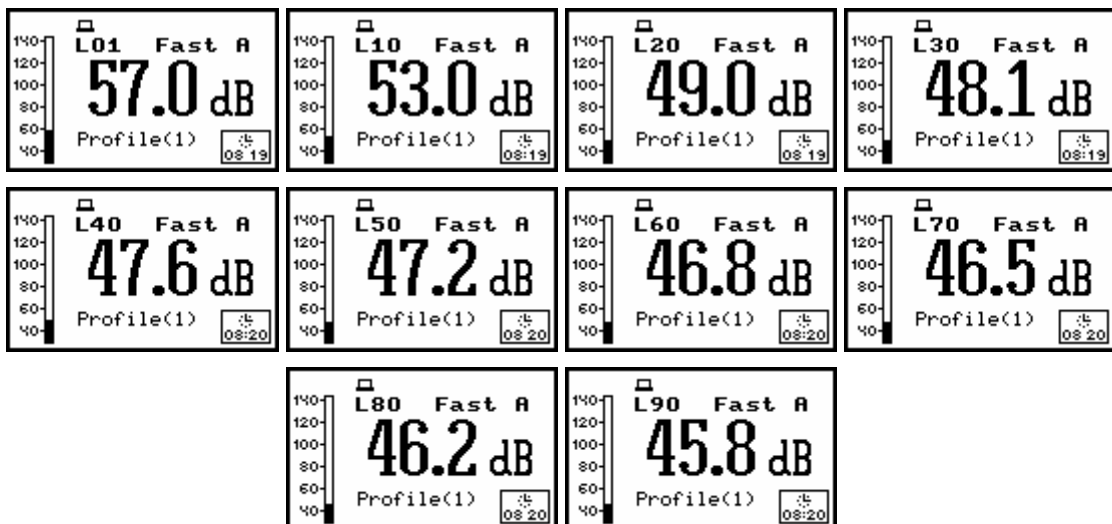
The statistics (i.e. these set in the instrument as a default: L01, L10, L20, L30, L40, L50, L60, L70, L80 and L90), which are available only in SM, are visible in one profile's mode after pressing the <SHIFT> and <^> or <SHIFT> and <v> push-buttons.

The user can make the selection of these ten statistics Lxx in the STAT. LEVELS window (path: MENU / SETUP / STAT. LEVELS). The statistics are not longer displayed after pressing the <v> or the <^> push-buttons.



Displays with the statistics made with linear integration presented in one profile mode

The change of the RMS integration (*path: MENU / SETUP / RMS INTEGRATION*) from linear to exponential influence a little bit the presentation – instead of **Lin.** there is the time constant (**FAST**, **SLOW**, **IMP.**) on the display.

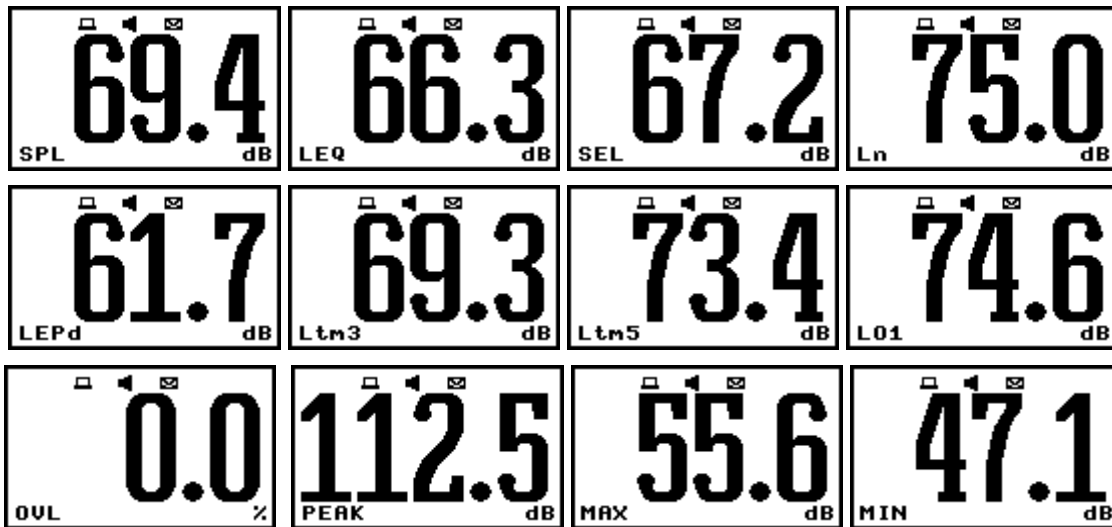


Displays with the statistics made with exponential integration presented in one profile mode

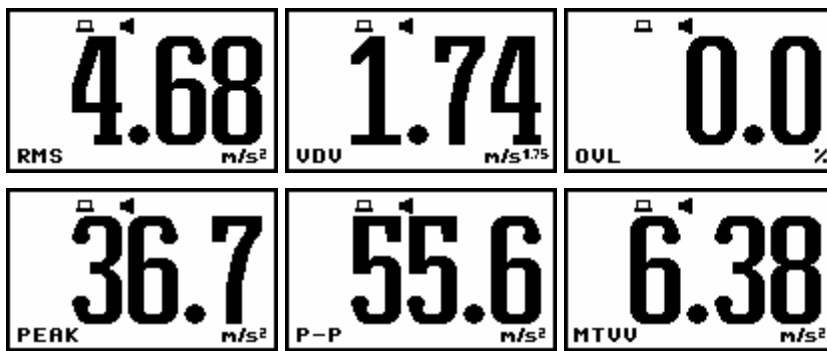
There is also possible to present differently the measurement data in one profile after pressing the **<ALT>** and **<▲>** or **<ALT>** and **<▼>** push-buttons. In this case, the result is displayed with the biggest possible fonts. The name of the result together with the units is given in the bottom line. The current result from a selected profile is changed after pressing the **<▶>** or the **<◀>** push-buttons. The profile the results are coming from is changed after pressing the **<SHIFT>** and **<▲>** or **<SHIFT>** and **<▼>** but the **profile's number is not visible** on the display.

The same result can be achieved after pressing the **<ALT>** and **<◀>** or **<ALT>** and **<▶>** push-buttons. When the statistics level **Lxx** is presented, the another levels from the set of ten values are available after pressing the **<SHIFT>** and **<◀>** or **<SHIFT>** and **<▶>** push-buttons.

The presentation mode is changed (to **3 PROFILES**, **STATISTICS** and **LOGGER** or **FILE INFO** if all of them are currently available) after pressing the **<▲>** or **<▼>** push-buttons.



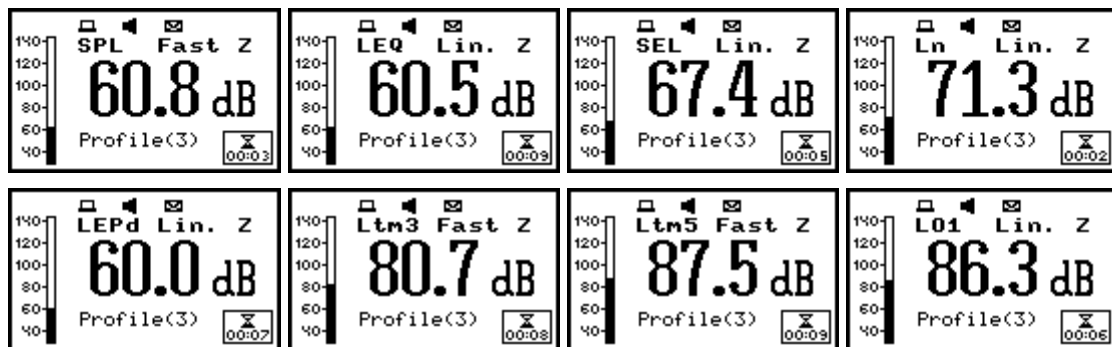
Measurement results in SM and unknown profile presented with the biggest fonts in one profile mode



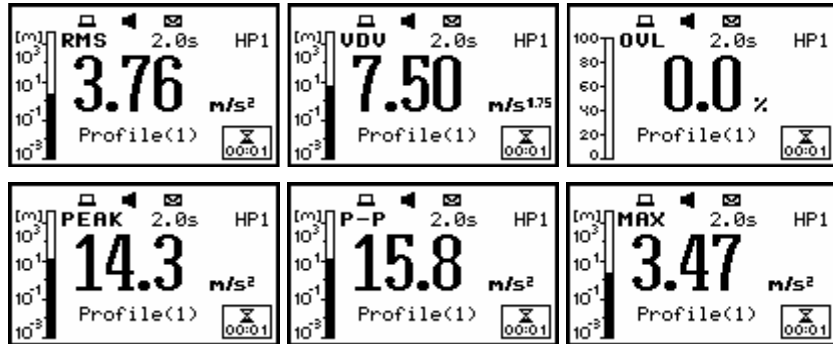
Measurement results in VM and unknow profile presented with the biggest fonts in one profile mode

When the measurements are performed, what is indicated on the display by the **loudspeaker** icon, the clock displayed in the right bottom shows the current second of the measurement. The value presented there belongs to the range [1, INTEGRATION PERIOD].

The **envelope** icon visible above and below indicates that the selected results from the profiles (path: MENU / INPUT / PROFILE x) are logged.



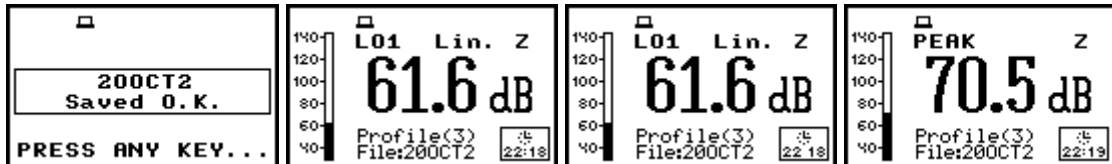
Displays during the measurement performed in SOUND LEVEL METER mode with the active LOGGER (an envelope icon)



Displays during the measurement performed in VM with the active **LOGGER** (an envelope icon)

The results can be saved using **SAVE**, **SAVE NEXT** or **AUTO SAVE** functions after the end of the measurements caused by the selected reasons.

It is not possible to save the results during the execution of the measurements. In the case when the saving was done, the name of the logger's file is presented in the bottom line of one profile display and the clock starts to show the real time.



Displays after stopping the measurements with the name of the logger's file the data are saved

The display in one profile mode with the results coming from the **DOSE METER** (in **SM**) looks nearly the same as it was described above for the **LEVEL METER** mode.

The measurement result (**PEAK**, **MAX**, **MIN**, **SPL**, **DOSE**, **D_8h**, **LAV**, **LEQ**, **SEL**, **SEL8**, **E**, **E_8h**, **LEPd**, **PSEL**, **Ltm3**, **Ltm5**, **Lxx** and **OVL** – cf. the definitions in App. D) is presented in the first line of the display.

Next, either the detector (*path: MENU / INPUT / PROFILE x / DETECTOR*) time constant (**Fast**, **Slow** or **Impulse**) is given for all results (except **PEAK** and **OVL**) or in the case of **LINEAR RMS INTEGRATION** (*path: MENU / SETUP / RMS INTEGRATION / LINEAR*) for **LEQ**, **SEL**, **SEL8**, **E**, **E_8h**, **LEPd**, **PSEL** and **Lxx** results the **Lin.** text appears on the display.



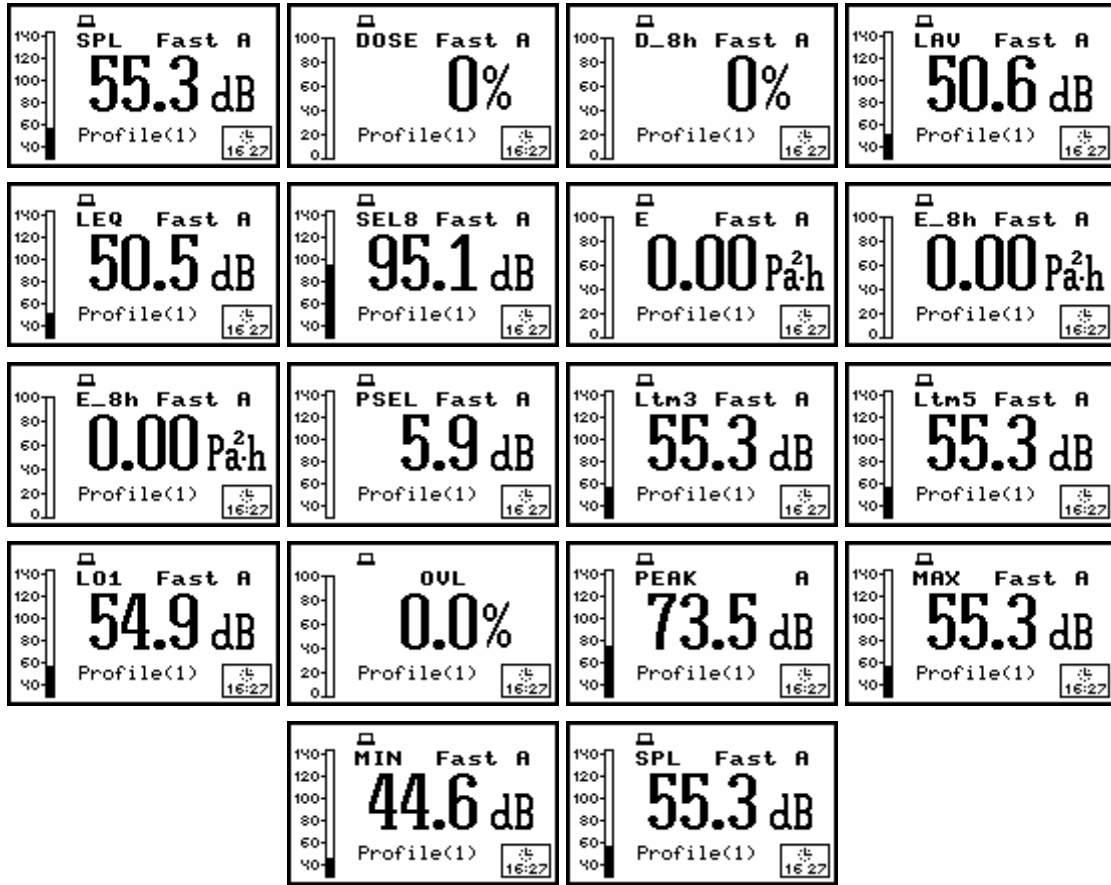
Notice: There is not any indication of the detector in the case of **PEAK** and **OVL** results.

The name of the implemented filter (*path: MENU / INPUT / PROFILE x / FILTER*) is presented as the last element of the first line (**A**, **C** or **Z**).

The result of the measurement together with its unit (dB for almost all results, % - for **DOSE**, **D_8h** and **OVL** and Pa²h for **E** and **E_8h**) is given in the second line. The profile, the results are coming from, is visible in the bottom of the display (**Profile(1)**, **Profile(2)** or **Profile(3)**).

The line showing the value of the result in the analogue-like form together with the appropriate scale is presented at the left side of the display. The real time clock is visible in the bottom right corner of the display.

The selection of the result is made pressing the <◀>, <▶> push-buttons. If the measurement results are saved in the internal memory in a file, its name is presented under the profile's number.



Measurement results from DOSE METER, made with exponential integration, presented in one profile mode

6.1.1 Switching on/off spectrum view - SPECTRUM

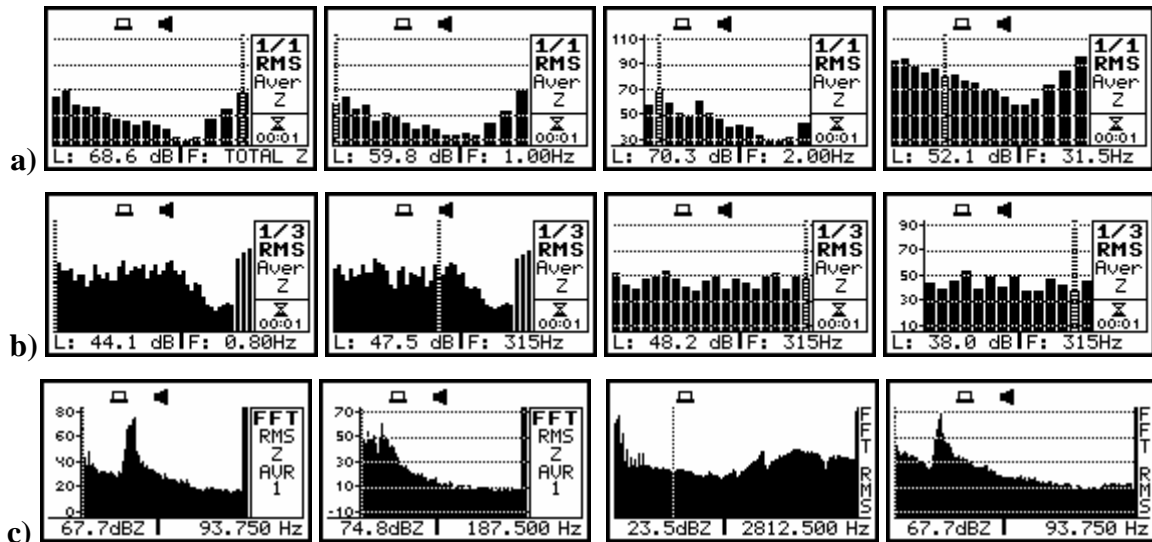
The **SPECTRUM** position is accesible only in 1/1 OCTAVE, 1/3 OCTAVE, FFT and TONALITY function (*path: MENU / FUNCTION / MEASUREMENT FUNCTION*). The possibility of the measurement results presentation in **SPECTRUM** can be switched on or off placing or replacing the special character in the displayed inversely line with the **SPECTRUM** text by means of the <◀>, <▶> push-buttons. In order to confirm the selection the user has to press the <ENTER> push-button. This confirmation closes also the **DISPLAY MODES** sub-list. The sub-list can be also closed after pressing the <ESC> push-button but the settings made there are ignored.

DISPLAY MODES		DISPLAY MODES	
SPECTRUM	: [✓]	SPECTRUM	: []
3 PROFILES	: [✓]	3 PROFILES	: [✓]
STATISTICS	: [✓]	STATISTICS	: [✓]
LOGGER	: [✓]	LOGGER	: [✓]
FILE INFO	: []	FILE INFO	: []

DISPLAY MODES windows in SM; SPECTRUM position accesible

DISPLAY MODES		DISPLAY MODES	
SPECTRUM	: [✓]	SPECTRUM	: []
3 PROFILES	: [✓]	3 PROFILES	: [✓]
LOGGER	: [✓]	LOGGER	: [✓]
FILE INFO	: []	FILE INFO	: []

DISPLAY MODES windows in VM



Displays in SPECTRUM mode for 1/1 OCTAVE (a), 1/3 OCTAVE (b) and FFT (c)

6.1.2 Switching on/off three profiles view - 3 PROFILES

The possibility of the measurement results presentation in **3 PROFILES** can be switched on or off placing or replacing the special character in the displayed inversely line with the **3 PROFILES** text by means of the <◀>, <▶> push-buttons. In order to confirm the selection the user has to press the <ENTER> push-button. This confirmation closes also the **DISPLAY MODES** sub-list. The sub-list can be also closed after pressing the <ESC> push-button but the settings made there are ignored.

DISPLAY MODES		DISPLAY MODES	
SPECTRUM	: []	SPECTRUM	: []
3 PROFILES	: [✓]	3 PROFILES	: [✓]
STATISTICS	: [✓]	STATISTICS	: [✓]
LOGGER	: [✓]	LOGGER	: [✓]
FILE INFO	: []	FILE INFO	: []

Setting on and off the accessibility of three profiles presentation mode

The exemplary measurement results presented in the **3 PROFILES** mode when the results from three profiles are on the display are given below. In the case of the **3 PROFILES** in three consecutive lines the following data are seen: the name of the function, the result together with the units, the filters and detector time constants in each profile (in the case of sound mode) and (in the case of vibration mode) the profil number (**P(1)**, **P(2)**, **P(3)**). The current real time, the profile from which the result is displayed inversely and the name of the file, in which the results are saved, are displayed at the bottom. At the right bottom, there is another clock, which displays real time in the case when the measurements are performed and the current second of the measurement – in the opposite case. The **PEAK** result does not depend on the detector type, so the corresponding place remains empty. In the case of sound measurements when the measurement result (**LEQ**, **SEL**, **Lden**, **LEPd** and **Lxx**) depends on the linear RMS integration currently set in the **RMS INTEGRATION** (*path: MENU / SETUP / RMS INTEGRATION*), the **L** is placed instead of the letter **F**, **S** or **I** (*Fast*, *Slow*, *Impulse*). In the case of the exponential RMS integration, the kind of this detector is displayed (**F**, **S** or **I**).

LEQ	39.8dB	A L		OVL	0.0%			RMS	288 mm/s ²	P(1)
SEL	47.8dB	C L		PEAK	80.8dB	C		PEAK	617 mm/s ²	P(2)
SPL	60.2dB	Z F		L01	71.7dB	Z L		MTVV	138 mm/s ²	P(3)
15:05	Profile(2)	15:05		12:13	Profile(3)	12:13		17:46	Profile(1)	00:01
	File:16OCT2								File:13APR0	

Measurement results in 3 PROFILES mode

The presented result in a selected profile is changed using the <◀>, <▶> push-buttons as presented below for sound and vibration measurements.

<table border="1"> <tr><td>PEAK</td><td>79.2dB</td><td>A</td></tr> <tr><td>PEAK</td><td>80.8dB</td><td>C</td></tr> <tr><td>PEAK</td><td>80.6dB</td><td>Z</td></tr> <tr><td>12:16</td><td>Profile(3)</td><td>12:16</td></tr> </table>	PEAK	79.2dB	A	PEAK	80.8dB	C	PEAK	80.6dB	Z	12:16	Profile(3)	12:16	<table border="1"> <tr><td>PEAK</td><td>79.2dB</td><td>A</td></tr> <tr><td>PEAK</td><td>80.8dB</td><td>C</td></tr> <tr><td>MAX</td><td>70.7dB</td><td>Z F</td></tr> <tr><td>12:16</td><td>Profile(3)</td><td>12:16</td></tr> </table>	PEAK	79.2dB	A	PEAK	80.8dB	C	MAX	70.7dB	Z F	12:16	Profile(3)	12:16	<table border="1"> <tr><td>PEAK</td><td>79.2dB</td><td>A</td></tr> <tr><td>PEAK</td><td>80.8dB</td><td>C</td></tr> <tr><td>MIN</td><td>53.5dB</td><td>Z F</td></tr> <tr><td>12:16</td><td>Profile(3)</td><td>12:16</td></tr> </table>	PEAK	79.2dB	A	PEAK	80.8dB	C	MIN	53.5dB	Z F	12:16	Profile(3)	12:16	<table border="1"> <tr><td>PEAK</td><td>79.2dB</td><td>A</td></tr> <tr><td>PEAK</td><td>80.8dB</td><td>C</td></tr> <tr><td>SPL</td><td>65.6dB</td><td>Z F</td></tr> <tr><td>12:16</td><td>Profile(3)</td><td>12:16</td></tr> </table>	PEAK	79.2dB	A	PEAK	80.8dB	C	SPL	65.6dB	Z F	12:16	Profile(3)	12:16
PEAK	79.2dB	A																																																	
PEAK	80.8dB	C																																																	
PEAK	80.6dB	Z																																																	
12:16	Profile(3)	12:16																																																	
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PEAK	80.8dB	C																																																	
MAX	70.7dB	Z F																																																	
12:16	Profile(3)	12:16																																																	
PEAK	79.2dB	A																																																	
PEAK	80.8dB	C																																																	
MIN	53.5dB	Z F																																																	
12:16	Profile(3)	12:16																																																	
PEAK	79.2dB	A																																																	
PEAK	80.8dB	C																																																	
SPL	65.6dB	Z F																																																	
12:16	Profile(3)	12:16																																																	

Results in 3 PROFILES mode (SM); selection of the result in a profile

<table border="1"> <tr><td>RMS</td><td>288 mm/s²</td><td>P(1)</td></tr> <tr><td>PEAK</td><td>617 mm/s²</td><td>P(2)</td></tr> <tr><td>MTUV</td><td>138 mm/s²</td><td>P(3)</td></tr> <tr><td>17:50</td><td>Profile(1)</td><td>00:01</td></tr> <tr><td></td><td>File:13APR0</td><td></td></tr> </table>	RMS	288 mm/s ²	P(1)	PEAK	617 mm/s ²	P(2)	MTUV	138 mm/s ²	P(3)	17:50	Profile(1)	00:01		File:13APR0		<table border="1"> <tr><td>UDU</td><td>351 mm/s^{1.5}</td><td>P(1)</td></tr> <tr><td>PEAK</td><td>617 mm/s²</td><td>P(2)</td></tr> <tr><td>MTUV</td><td>138 mm/s²</td><td>P(3)</td></tr> <tr><td>17:49</td><td>Profile(1)</td><td>00:01</td></tr> <tr><td></td><td>File:13APR0</td><td></td></tr> </table>	UDU	351 mm/s ^{1.5}	P(1)	PEAK	617 mm/s ²	P(2)	MTUV	138 mm/s ²	P(3)	17:49	Profile(1)	00:01		File:13APR0		<table border="1"> <tr><td>OVL</td><td>0.0%</td><td>P(1)</td></tr> <tr><td>PEAK</td><td>617 mm/s²</td><td>P(2)</td></tr> <tr><td>MTUV</td><td>138 mm/s²</td><td>P(3)</td></tr> <tr><td>17:49</td><td>Profile(1)</td><td>00:01</td></tr> <tr><td></td><td>File:13APR0</td><td></td></tr> </table>	OVL	0.0%	P(1)	PEAK	617 mm/s ²	P(2)	MTUV	138 mm/s ²	P(3)	17:49	Profile(1)	00:01		File:13APR0		<table border="1"> <tr><td>TIME</td><td>00:00:01</td><td>P(1)</td></tr> <tr><td>PEAK</td><td>617 mm/s²</td><td>P(2)</td></tr> <tr><td>MTUV</td><td>138 mm/s²</td><td>P(3)</td></tr> <tr><td>17:49</td><td>Profile(1)</td><td>00:01</td></tr> <tr><td></td><td>File:13APR0</td><td></td></tr> </table>	TIME	00:00:01	P(1)	PEAK	617 mm/s ²	P(2)	MTUV	138 mm/s ²	P(3)	17:49	Profile(1)	00:01		File:13APR0	
RMS	288 mm/s ²	P(1)																																																													
PEAK	617 mm/s ²	P(2)																																																													
MTUV	138 mm/s ²	P(3)																																																													
17:50	Profile(1)	00:01																																																													
	File:13APR0																																																														
UDU	351 mm/s ^{1.5}	P(1)																																																													
PEAK	617 mm/s ²	P(2)																																																													
MTUV	138 mm/s ²	P(3)																																																													
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	File:13APR0																																																														

Results in 3 PROFILES mode (VM); selection of the result in a profile

The change of the selected (displayed inversely) profile is done pressing the <SHIFT> and <▼> or <SHIFT> and <▲> push-buttons. The same result can be achieved after pressing the <ALT> and <◀> or <ALT> and <▶> push-buttons.

<table border="1"> <tr><td>PEAK</td><td>79.2dB</td><td>A</td></tr> <tr><td>PEAK</td><td>80.8dB</td><td>C</td></tr> <tr><td>L01</td><td>71.7dB</td><td>Z L</td></tr> <tr><td>12:15</td><td>Profile(1)</td><td>12:15</td></tr> </table>	PEAK	79.2dB	A	PEAK	80.8dB	C	L01	71.7dB	Z L	12:15	Profile(1)	12:15	<table border="1"> <tr><td>PEAK</td><td>79.2dB</td><td>A</td></tr> <tr><td>PEAK</td><td>80.8dB</td><td>C</td></tr> <tr><td>L01</td><td>71.7dB</td><td>Z L</td></tr> <tr><td>12:15</td><td>Profile(2)</td><td>12:15</td></tr> </table>	PEAK	79.2dB	A	PEAK	80.8dB	C	L01	71.7dB	Z L	12:15	Profile(2)	12:15	<table border="1"> <tr><td>PEAK</td><td>79.2dB</td><td>A</td></tr> <tr><td>PEAK</td><td>80.8dB</td><td>C</td></tr> <tr><td>L01</td><td>71.7dB</td><td>Z L</td></tr> <tr><td>12:15</td><td>Profile(3)</td><td>12:15</td></tr> </table>	PEAK	79.2dB	A	PEAK	80.8dB	C	L01	71.7dB	Z L	12:15	Profile(3)	12:15
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12:15	Profile(3)	12:15																																				

Results in 3 PROFILES mode; selection of the profile

Ten statistics set by the user (path: MENU / SETUP / STAT. LEVELS) or set in the instrument as a default (L01, L10, L20, L30, L40, L50, L60, L70, L80 and L90) are visible in this mode after pressing the <SHIFT> and <▶> or <SHIFT> and <◀> push-buttons.

<table border="1"> <tr><td>OVL</td><td>0.0%</td><td></td></tr> <tr><td>PEAK</td><td>80.8dB</td><td>C</td></tr> <tr><td>L01</td><td>71.7dB</td><td>Z L</td></tr> <tr><td>12:13</td><td>Profile(3)</td><td>12:13</td></tr> </table>	OVL	0.0%		PEAK	80.8dB	C	L01	71.7dB	Z L	12:13	Profile(3)	12:13	<table border="1"> <tr><td>OVL</td><td>0.0%</td><td></td></tr> <tr><td>PEAK</td><td>80.8dB</td><td>C</td></tr> <tr><td>L10</td><td>69.9dB</td><td>Z L</td></tr> <tr><td>12:13</td><td>Profile(3)</td><td>12:13</td></tr> </table>	OVL	0.0%		PEAK	80.8dB	C	L10	69.9dB	Z L	12:13	Profile(3)	12:13	<table border="1"> <tr><td>OVL</td><td>0.0%</td><td></td></tr> <tr><td>PEAK</td><td>80.8dB</td><td>C</td></tr> <tr><td>L20</td><td>68.3dB</td><td>Z L</td></tr> <tr><td>12:13</td><td>Profile(3)</td><td>12:13</td></tr> </table>	OVL	0.0%		PEAK	80.8dB	C	L20	68.3dB	Z L	12:13	Profile(3)	12:13	<table border="1"> <tr><td>OVL</td><td>0.0%</td><td></td></tr> <tr><td>PEAK</td><td>80.8dB</td><td>C</td></tr> <tr><td>L30</td><td>67.6dB</td><td>Z L</td></tr> <tr><td>12:13</td><td>Profile(3)</td><td>12:13</td></tr> </table>	OVL	0.0%		PEAK	80.8dB	C	L30	67.6dB	Z L	12:13	Profile(3)	12:13
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<table border="1"> <tr><td>OVL</td><td>0.0%</td><td></td></tr> <tr><td>PEAK</td><td>80.8dB</td><td>C</td></tr> <tr><td>L40</td><td>66.9dB</td><td>Z L</td></tr> <tr><td>12:13</td><td>Profile(3)</td><td>12:13</td></tr> </table>	OVL	0.0%		PEAK	80.8dB	C	L40	66.9dB	Z L	12:13	Profile(3)	12:13	<table border="1"> <tr><td>OVL</td><td>0.0%</td><td></td></tr> <tr><td>PEAK</td><td>80.8dB</td><td>C</td></tr> <tr><td>L50</td><td>65.9dB</td><td>Z L</td></tr> <tr><td>12:13</td><td>Profile(3)</td><td>12:13</td></tr> </table>	OVL	0.0%		PEAK	80.8dB	C	L50	65.9dB	Z L	12:13	Profile(3)	12:13	<table border="1"> <tr><td>OVL</td><td>0.0%</td><td></td></tr> <tr><td>PEAK</td><td>80.8dB</td><td>C</td></tr> <tr><td>L60</td><td>59.4dB</td><td>Z L</td></tr> <tr><td>12:13</td><td>Profile(3)</td><td>12:13</td></tr> </table>	OVL	0.0%		PEAK	80.8dB	C	L60	59.4dB	Z L	12:13	Profile(3)	12:13	<table border="1"> <tr><td>OVL</td><td>0.0%</td><td></td></tr> <tr><td>PEAK</td><td>80.8dB</td><td>C</td></tr> <tr><td>L70</td><td>57.6dB</td><td>Z L</td></tr> <tr><td>12:13</td><td>Profile(3)</td><td>12:13</td></tr> </table>	OVL	0.0%		PEAK	80.8dB	C	L70	57.6dB	Z L	12:13	Profile(3)	12:13
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L90	54.9dB	Z L																																																	
12:13	Profile(3)	12:13																																																	

Displays with the statistics made with linear integration presented in 3 PROFILES mode

During the measurements, which are indicated by the **loudspeaker** icon, the current time from the range [1, INTEGRATION PERIOD] is displayed on the right bottom clock. The **envelope** icon indicates that results selected in the profiles (path: MENU / INPUT / PROFILE x) are logged.

LEQ	71.0dB	A	L	SEL	73.6dB	A	L	Ln	80.2dB	A	L
SPL	74.8dB	C	F	SPL	76.5dB	C	F	SPL	75.9dB	C	F
PEAK	89.5dB	Z		PEAK	87.0dB	Z		PEAK	88.3dB	Z	
22:19	Profile(1)		00:09	22:20	Profile(1)		00:03	22:20	Profile(1)		00:09

Displays during the measurement performed in SM with the active **LOGGER**

There is also possible to present differently the measurement data in **3 PROFILES** after pressing the **<ALT>** and **<^>** or **<ALT>** and **<v>** push-buttons. In this case, at the left side of the display three analogue-like indicators are shown, each one for the selected result from a profile. The currently active profile is marked by the cursor and inversely displayed name of the function. The filter selected in that profile and the integration type (in the case of the linear one) or the detector type (in the case of exponential) are written below the measurement results. During the measurements, the bottom right clock displays the current time from the range [1, **INTEGRATION PERIOD**]. The current result from a selected profile is changed after pressing the **<^>** or the **<v>** push-buttons. The profile the results are coming from is changed after pressing the **<SHIFT>** and **<^>** or **<SHIFT>** and **<v>**. The same result can be achieved after pressing the **<ALT>** and **<^>** or **<ALT>** and **<v>** push-buttons. When the statistics level **Lxx** is presented, the another levels from the set of ten values are available after pressing the **<SHIFT>** and **<^>** or **<SHIFT>** and **<v>** push-buttons. The results can be saved using **SAVE**, **SAVE NEXT** or **AUTO SAVE** functions after the end of the measurements caused by the selected reasons. It is not possible to save the results during the execution of the measurements. In the case when the saving was done, the name of the logger's file is presented in the bottom line of one profile display and the clock starts to show the real time. The presentation mode is changed (to one profile, **STATISTICS** and **LOGGER** or **FILE INFO** if all of them are currently available) after pressing the **<^>** or **<v>** push-buttons.

Ln	76.9dB	LEPc	66.6dB	Ln3	69.8dB	Ln5	71.2dB	Ln	76.9dB	SPL	72.3dB
SPL	72.3dB	SPL	73.8dB	SPL	73.5dB	SPL	72.4dB	SPL	72.3dB	PEAK	91.0dB
PEAK	91.0dB	PEAK	85.8dB	PEAK	84.8dB	PEAK	86.7dB	PEAK	91.0dB	P(1)	A L
00:07		00:04		00:01		22:20		00:07		File:20OCT3	22:20

Displays during the measurement performed in **LEVEL METER** mode with the active **LOGGER** (the first three) and after saving the results (the last one)

6.1.3 Setting on/off statistics view in SM - STATISTICS

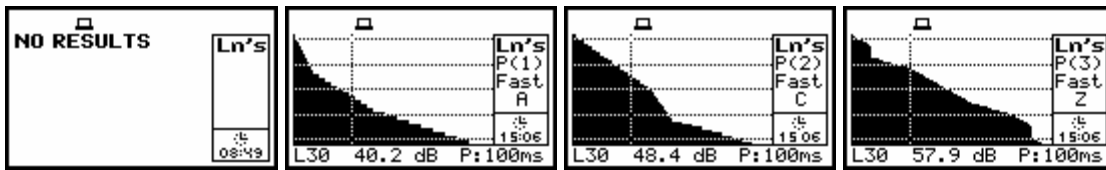
The possibility of the statistics results presentation can be switched on or off placing or replacing the special character in the displayed inversely line with the **STATISTICS** text by means of the **<^>**, **<v>** push-buttons. In order to confirm the selection the user has to press the **<ENTER>** push-button. This confirmation closes also the **DISPLAY MODES** sub-list. The sub-list can be also closed after pressing the **<ESC>** push-button but the settings made there are ignored. The **STATISTICS** mode is taken off from the **DISPLAY MODES** window in **VM**.

DISPLAY MODES		DISPLAY MODES	
SPECTRUM	: []	SPECTRUM	: []
3 PROFILES	: [v]	3 PROFILES	: [v]
STATISTICS	: [v]	STATISTICS	: []
LOGGER	: [v]	LOGGER	: [v]
FILE INFO	: []	FILE INFO	: []

Setting on (a) and off (b) the accessibility of statistics presentation mode

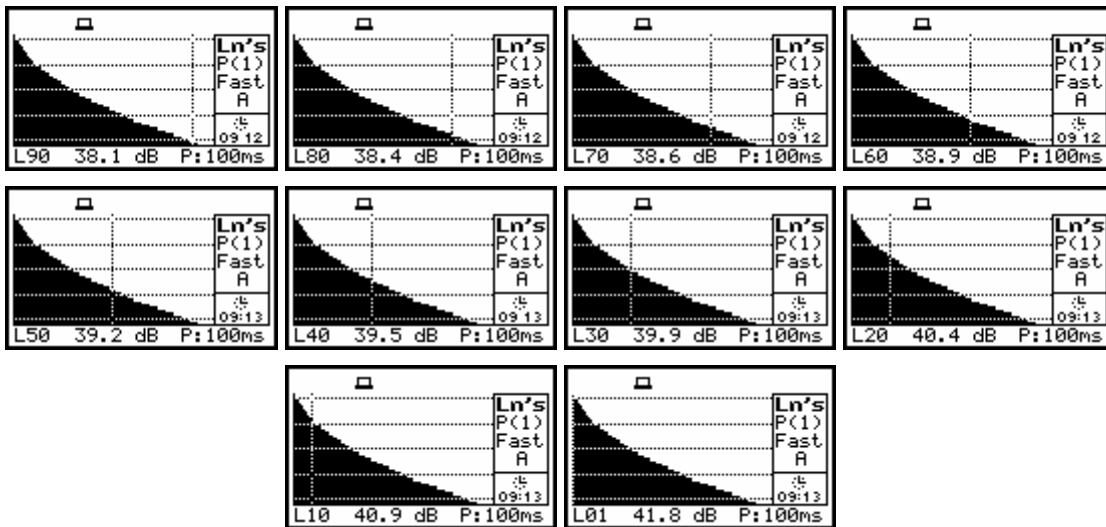
The display with the statistics analysis results presents in the graphical form the values from **L01** to **L99**. The **Lxx** level selected by the cursor is displayed in the bottom line together with its value and units (dB). The P value indicating that the statistics results are updated every 100 ms is placed at the end of the bottom line. The profile's number the statistics are taken from, the **RMS** detector (**Lin.**, or **Exp.**:

Fast, Slow or Imp.), the filter's name (A, C or Z) and real time are displayed on the right side of the view in the presentation modes. The selection of the profile is made by pressing the <SHIFT> and <▲> or the <SHIFT> and <▼> push-buttons. The same result can be achieved after pressing the <ALT> and <◀> or <ALT> and <▶> push-buttons.



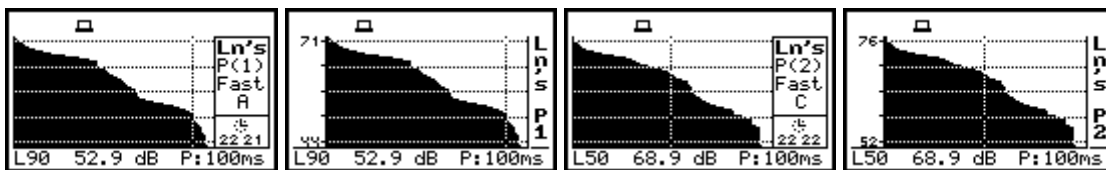
Results presented in the statistics presentation mode

The selection of the Lxx to be displayed is done by pressing the <◀>, <▶> push-buttons. The statistics L01 is immediately available after pressing the <SHIFT> and <◀> while the L99 - after pressing the <SHIFT> and <▶> push-buttons.



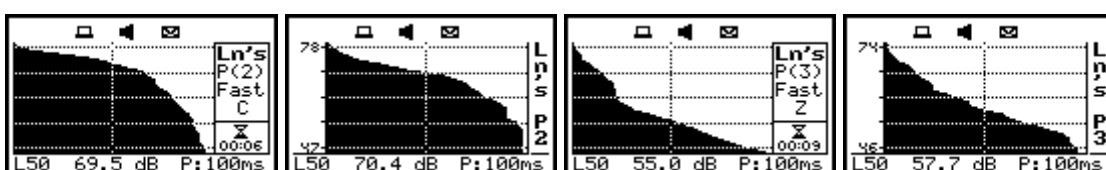
Instrument's default Lxx levels presented in the graphical form

The change of the mode is done by pressing the <ALT> and <▲> or the <ALT> and <▼> push-buttons. The second mode differs slightly from the first one described above: the description on the left side is shorter but on the right side the value of the statistic levels are shown.



Results presented in both statistic presentation modes

During the measurements, which are indicated by the **loudspeaker icon**, the current time from the range [1, INTEGRATION PERIOD] is displayed on the right bottom clock in the first mode. The **envelope icon** indicates that results selected in the profiles (path: MENU / INPUT / PROFILE x) are logged.



Results presented in both statistic presentation modes during the measurements

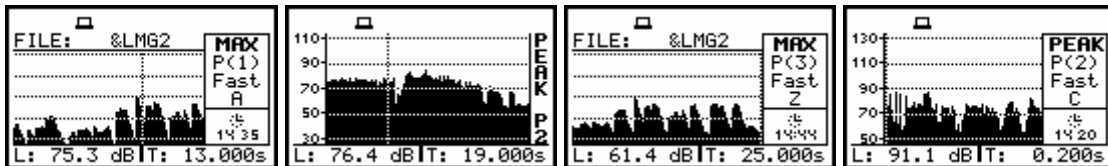
6.1.4 Setting on/off logger view - LOGGER

The possibility of the presentation of the measurement results, which are saved in the logger, on the instrument's display can be switched on or off placing or replacing the special character in the displayed inversely line with the **LOGGER** text by means of the <◀>, <▶> push-buttons. In order to confirm the selection the user has to press the <ENTER> push-button. This confirmation closes also the **DISPLAY MODES** sub-list. The sub-list can be also closed after pressing the <ESC> push-button but the settings made there are ignored.

DISPLAY MODES		DISPLAY MODES	
SPECTRUM	: []	SPECTRUM	: []
3 PROFILES	: [✓]	3 PROFILES	: [✓]
STATISTICS	: [✓]	STATISTICS	: [✓]
LOGGER	: [✓]	LOGGER	: []
FILE INFO	: []	FILE INFO	: []

Setting on and off the accessibility of **LOGGER** presentation mode

The results saved in the logger can be presented in three different modes which differ slightly each other. These modes are changed after pressing the <ALT> and <▲> or the <ALT> and <▼> push-buttons or they can be set in the **VIEW** (path: MENU / DISPLAY / DISPLAY SETUP / **LOGGER VIEW** / **VIEW**).



Exemplary displays with the measurement results saved in the logger

6.1.5 Setting on/off the view of the file description - FILE INFO

The possibility of the additional file description presented on the instrument's display can be switched on or off placing or replacing the special character in the displayed inversely line with the **FILE INFO** text by means of the <◀>, <▶> push-buttons. In order to confirm the selection the user has to press the <ENTER> push-button. This confirmation closes also the **DISPLAY MODES** sub-list. The sub-list can be also closed after pressing the <ESC> push-button but the settings made there are ignored.

DISPLAY MODES		DISPLAY MODES	
SPECTRUM	: []	SPECTRUM	: []
3 PROFILES	: [✓]	3 PROFILES	: [✓]
STATISTICS	: [✓]	STATISTICS	: [✓]
LOGGER	: [✓]	LOGGER	: [✓]
FILE INFO	: []	FILE INFO	: [✓]

Setting on and off the file description presentation mode

In the **FILE INFO** window the file name, its size, date and time of the registration of the main results (cf. App. B) and time (so-called **ELAPSED TIME**) during which the main results saved in the logger were measured. The value presented there belongs to the range [1, **INTEGRATION PERIOD**] and depends on the moment and the way the measurements were stopped.

FILE INFO	FILE INFO
FILE NAME: 16OCT0	FILE NAME: 19MAR63
FILE SIZE: 374B	FILE SIZE: 466B
DATE: 16 OCT 2006	DATE: 19 MAR 2007
TIME: 09:13:14	TIME: 18:00:22
ELAPSED TIME:00:00:01	ELAPSED TIME:00:00:01

Exemplary contents of the **FILE INFO** window

6.2 Setting the parameters of the graphical modes - DISPLAY SETUP

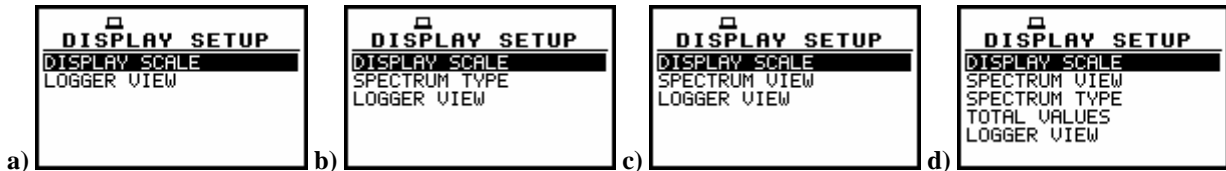
The **DISPLAY SETUP** sub-list enables the user to change several parameters of the graphical results presentations. Using the **DISPLAY SCALE** sub-list for example, one can select the scale in the available modes of graphical presentation of the measurement results (time history in the **LOGGER** and spectra in the **SPECTRUM**). Using the **TOTAL VALUES** sub-list it is possible to select the weighting filters used in the calculation of the Total values. This sub-list appears on the display only in the case of **1/1 OCTAVE** or **1/3 OCTAVE** analyser. Using the **SPECTRUM TYPE** sub-list, which appears on the display only in **VM**, it is possible to select the spectrum type which has to be presented during the vibration measurements. In order to enter the **DISPLAY SETUP** list one has to press the **<ENTER>** push-button on the inversely displayed **DISPLAY SETUP** text of the **DISPLAY** list. The **DISPLAY SETUP** sub-list is closed and the instrument returns to the **DISPLAY** after pressing the **<ESC>** push-button, which ignores any changes in the positions of the sub-list or the **<ENTER>** push-button, which confirms the changes.



DISPLAY list with the DISPLAY SETUP selected

6.2.1 Setting the scale of the presentation and the display's grid - DISPLAY SCALE

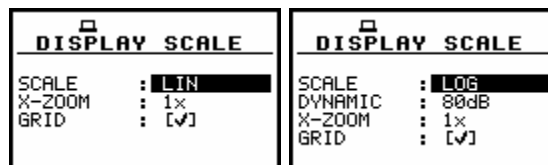
The **DISPLAY SCALE** sub-list enables the user to change the scale in the available modes of graphical presentation of the measurement results and switch on/off the grid. In order to enter this list one has to press the **<ENTER>** push-button on the inversely displayed **DISPLAY SCALE** text of the **DISPLAY SETUP** sub-list. The **DISPLAY SCALE** sub-list is closed and the instrument returns to the **DISPLAY SETUP** sub-list after pressing the **<ESC>** (the settings made there are not confirmed) or the **<ENTER>** push-button (the settings are confirmed).



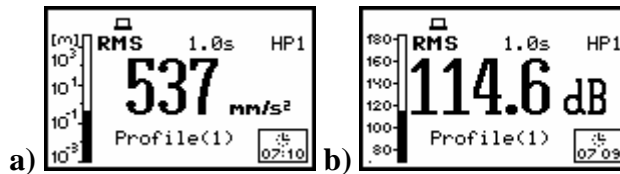
DISPLAY SETUP windows in SLM (a), in VLM (b) in FFT (SM) (c) and in 1/1 and 1/3 OCTAVE (VM) (d)

6.2.1.1 Setting the scale of the measurement results presentation - SCALE

The **SCALE** position is accessible only in the case of vibration measurements (*path: MENU / FUNCTION / MODE / VIBR. METER*). Two options are available: **LIN** (linear) and **LOG** (logarithmic). In the case of the first one the graphical presentation and the units both are linear. In the latter case the graphical presentation is given in the logarithmic scale and the measurement results are expressed in decibels (the result is related to the values set in the **REFERENCE LEVEL** – *path: MENU / SETUP / REFERENCE LEVEL*). It is possible to set the required option using the **<◀>**, **<▶>** push-buttons. The confirmation of the selection is made by pressing the **<ENTER>** push-button. The return without taking into account any change is made after pressing the **<ESC>** push-button. In the case of the sound measurements the **SCALE** position is not active. All results are presented in the logarithmic scale.



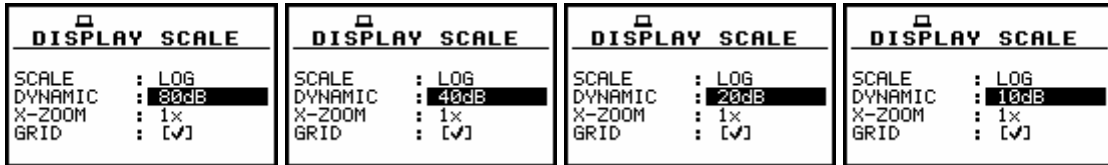
Displays with the possible options of the vibration SCALE



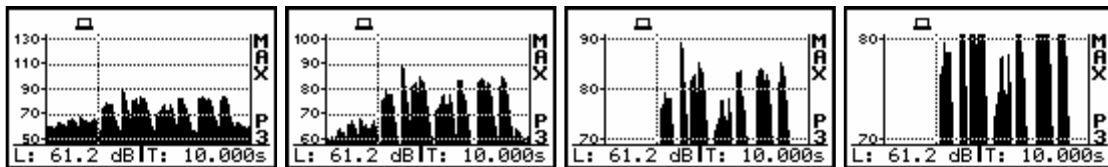
Measurement results (VM) presented in linear (a) and logarithmic (b) scale

6.2.1.2 Scaling the vertical axis of the graphical mode presentation - DYNAMIC

The **DYNAMIC** enables the user to select the proper scaling of the graphical mode presentation. In the case of the vertical axis one can obtain the double, four times and eight times expansion (as the default the vertical axis corresponds to 80 dB, after expansion it corresponds to 40 dB, 20 dB and 10 dB – respectively) using the <◀>, <▶> push-buttons and pressing the <ENTER> for the confirmation.



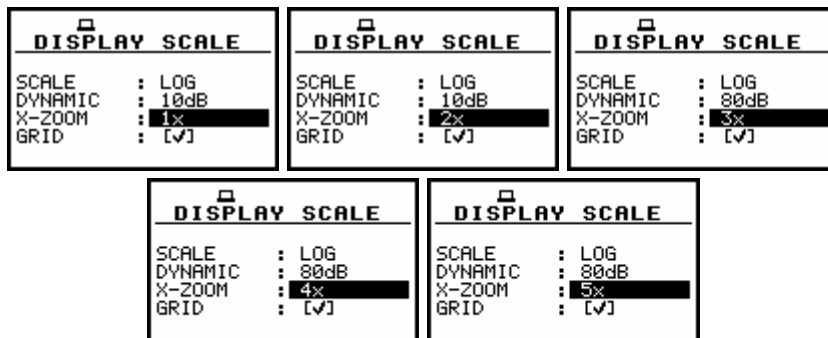
Displays with the possible values of the DYNAMIC parameter



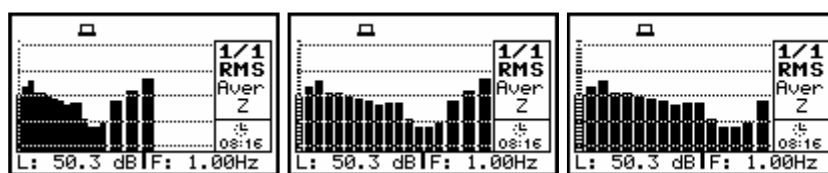
Displays with the results stored in the logger presented with different DYNAMIC parameter

6.2.1.3 Scaling the horizontal axis of the graphical presentation - X-ZOOM

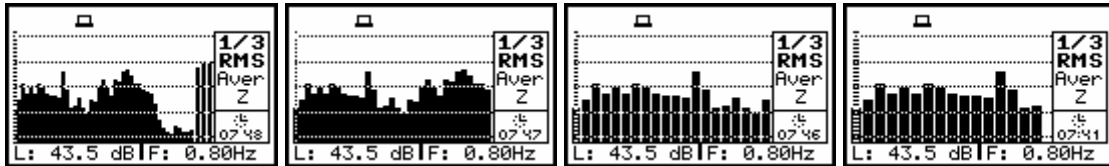
The **X-ZOOM** enables the user to change the horizontal axis in the **SPECTRUM** presentation mode by means of the <◀>, <▶> push-buttons. In order to confirm the selection the user has to press the <ENTER> push-button, which closes also the **DISPLAY SCALE** sub-list. The sub-list can be also closed after pressing the <ESC> push-button but the settings made there are ignored. In **1/1 OCTAVE** mode available values are **3x**, **4x** and **5x**. In **1/3 OCTAVE** mode available values are **2x**, **3x**, **5x**.



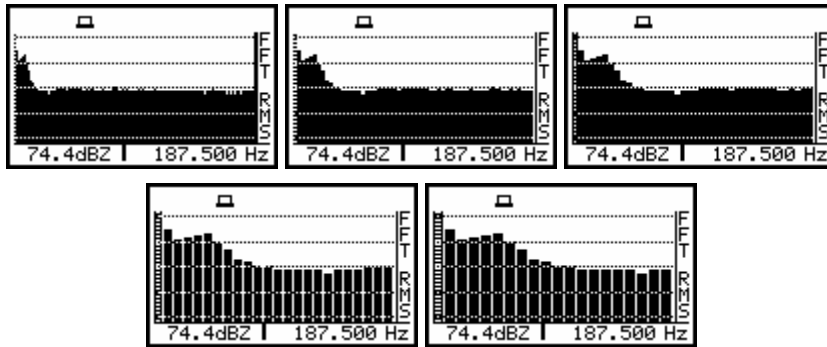
DISPLAY SCALE windows; the X-ZOOM selection



Displays in 1/1 OCTAVE SPECTRUM 3x, 4x, and 5x X-ZOOM



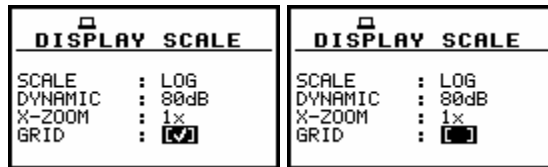
Displays in 1/3 OCTAVE SPECTRUM 2x, 3x, 4x, and 5x X-ZOOM



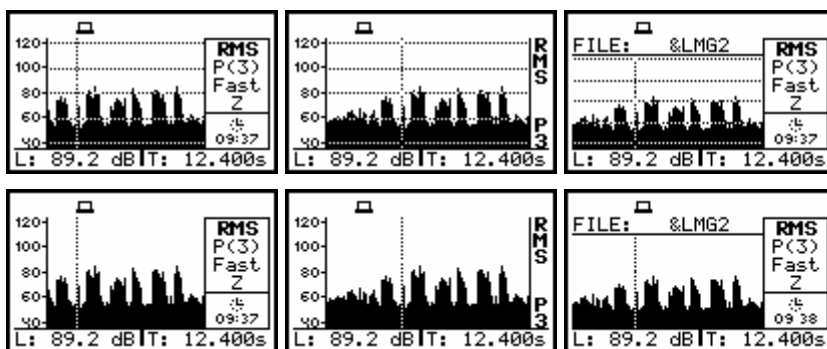
Displays in FFT SPECTRUM 1x, 2x, 3x, 4x, and 5x X-ZOOM

6.2.1.4 Switching on/off the grid in the graphical mode presentation - GRID

The **GRID** enables the user to switch on or off the grid in any graphical presentation placing or replacing the special character in the displayed inversely line with the **GRID** text by means of the <◀>, <▶> push-buttons. In order to confirm the selection the user has to press the <ENTER> push-button. This confirmation closes also the **DISPLAY SCALE** sub-list. The sub-list can be also closed after pressing the <ESC> push-button but the settings made there are ignored.



Displays with the grid switched on and off



Displays with the grid switched on and off

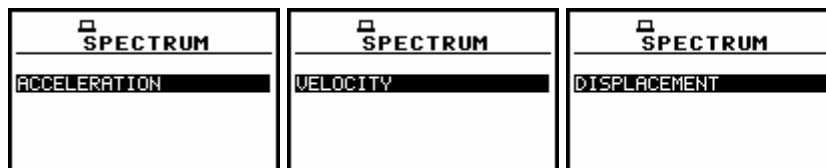
6.2.2 Selection of the Spectrum Type in VM - SPECTRUM TYPE

The **SPECTRUM TYPE** enables the user to change the spectrum type. This sub-list contains three positions: **ACCELERATION**, **VELOCITY** and **DISPLACEMENT** and is available only in the case of the vibration measurements.

In order to enter this sub-list one has to press the **<ENTER>** push-button on the inversely displayed **SPECTRUM TYPE** text of the **DISPLAY SETUP** sub-list. The user can selected the required type of the spectrum presented on the display by means of the **<◀>**, **<▶>** push-buttons. The **SPECTRUM TYPE** window is closed and the instrument returns to the **DISPLAY SETUP** list after pressing the **<ESC>** push-button, which ignores any changes in the positions of the sub-list or the **<ENTER>** push-button, which confirms the changes.



DISPLAY SETUP window; the SPECTRUM TYPE text highlighted



SPECTRUM TYPE windows with the available values

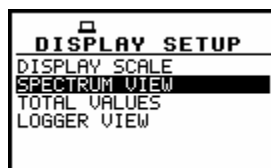
6.2.3 Setting the parameters of the logger files presentation - SPECTRUM VIEW

The **SPECTRUM VIEW** enables the user to change the shape of the graphical presentation (**VIEW**) and a **TYPE** parameter as well as to activate the presentation on the display the **MAX** and **MIN** spectrum.

In the **VIEW** position the **EXTENDED**, **FULL** and **NORMAL** views are available (by means of the **<◀>**, **<▶>** push-buttons).

In the **TYPE** position the **AVERAGED**, **INSTANTENOUS**, **MAX** and **MIN** texts are available (by means of the **<◀>**, **<▶>** push-buttons).

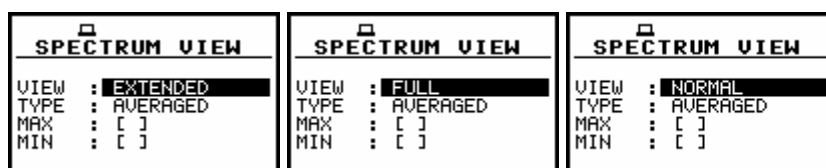
In order to enter this window one has to press the **<ENTER>** push-button on the inversely displayed **LOGGER VIEW** text of the **DISPLAY SETUP** sub-list. The **LOGGER VIEW** window is closed and the instrument returns to the **DISPLAY SETUP** sub-list after pressing the **<ESC>** (the settings made there are not confirmed) or the **<ENTER>** push-button (the settings are confirmed).



DISPLAY SETUP window; the SPECTRUM VIEW text highlighted

6.2.3.1 Selection of the graphical presentation type - VIEW

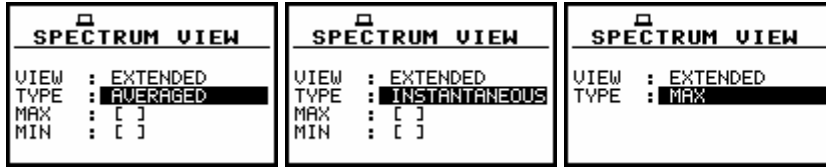
In the **VIEW** position the **EXTENDED**, **FULL** and **NORMAL** texts are available after pressing the **<◀>**, **<▶>** push-buttons. These texts correspond to the slightly different data presented on the display in the graphical presentation modes.



SPECTRUM VIEW windows; the VIEW selection

6.2.3.2 Selection of the spectrum type for the presentation - TYPE

In the **TYPE** position the **AVERAGED**, **INSTANTENOUS**, **MAX** and **MIN** texts are available after pressing the <◀>, <▶> push-buttons. Each text corresponds to the different spectrum type to be presented on the display in the graphical presentation modes.



SPECTRUM VIEW windows; the TYPE selection

6.2.3.3 Selection of the MAX spectrum for the presentation - MAX

In the **MAX** position the corresponding spectrum can be selected (by means of the <◀>, <▶> push-buttons) to be presented on the display in the graphical presentation modes.



SPECTRUM VIEW windows, the MAX selection

6.2.3.4 Selection of the MIN spectrum for the presentation - MIN

In the **MIN** position the corresponding spectrum can be selected (by means of the <◀>, <▶> push-buttons) to be presented on the display in the graphical presentation modes.



SPECTRUM VIEW windows; the MIN selection

6.2.4 Selection of the Weighting Filters - TOTAL VALUES

The **TOTAL VALUES**, which is available only in **1/1 OCTAVE** or **1/3 OCTAVE** analysis, enables the user to select the weighting filter.

In order to enter this window one has to press the <ENTER> push-button on the inversely displayed **TOTAL VALUES** text of the **DISPLAY SETUP** sub-list. The **TOTAL VALUES** window is closed and the instrument returns to the **DISPLAY SETUP** sub-list after pressing the <ESC> (the settings made there are not confirmed) or the <ENTER> push-button (the settings are confirmed).



DISPLAY SETUP window; the TOTAL VALUES text highlighted

TOTAL VALUES TOTAL 1: A TOTAL 2: C TOTAL 3: Z	TOTAL VALUES TOTAL 1: S1 TOTAL 2: C TOTAL 3: Z	TOTAL VALUES TOTAL 1: S2 TOTAL 2: C TOTAL 3: Z	TOTAL VALUES TOTAL 1: S3 TOTAL 2: C TOTAL 3: Z
TOTAL VALUES TOTAL 1: S1 TOTAL 2: C TOTAL 3: Z	TOTAL VALUES TOTAL 1: S3 TOTAL 2: S1 TOTAL 3: Z	TOTAL VALUES TOTAL 1: S1 TOTAL 2: S2 TOTAL 3: Z	TOTAL VALUES TOTAL 1: S1 TOTAL 2: S3 TOTAL 3: Z
TOTAL VALUES TOTAL 1: S1 TOTAL 2: S2 TOTAL 3: Z	TOTAL VALUES TOTAL 1: S1 TOTAL 2: S2 TOTAL 3: S1	TOTAL VALUES TOTAL 1: S1 TOTAL 2: S2 TOTAL 3: S2	TOTAL VALUES TOTAL 1: S1 TOTAL 2: S2 TOTAL 3: S3

TOTAL VALUES windows; the weighting filters selection in SM

In the case of vibration mode after entering the **TOTAL VALUES** position on the display appears sub-list with the **TOTAL 1**, **TOTAL 2** and **TOTAL3** positions. The selection of the position is made by <◀>, <▶> push-buttons and pressing <ENTER> for the confirmation.

TOTAL VALUES TOTAL 1 TOTAL 2 TOTAL 3	TOTAL VALUES TOTAL 1 TOTAL 2 TOTAL 3	TOTAL VALUES TOTAL 1 TOTAL 2 TOTAL 3
--	--	--

TOTAL VALUES windows in VM; the TOTALx selected

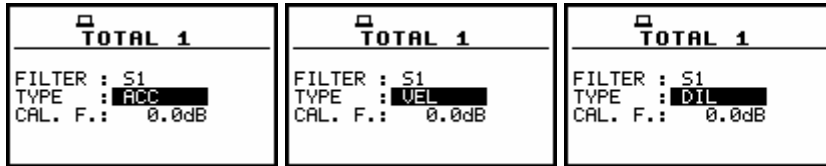
In the **TOTALx** window for user filters (**S1**, **S2**, **S3**) selected in the **FILTER** position, the **TYPE** and **CAL. F.** positions appear on the display.

TOTAL 1 FILTER : Z	TOTAL 1 FILTER : S1 TYPE : ACC CAL. F.: 0.0dB	TOTAL 1 FILTER : S2 TYPE : ACC CAL. F.: 0.0dB	TOTAL 1 FILTER : S3 TYPE : ACC CAL. F.: 0.0dB
TOTAL 2 FILTER : PR 2	TOTAL 2 FILTER : S1 TYPE : ACC CAL. F.: 0.0dB	TOTAL 2 FILTER : S2 TYPE : ACC CAL. F.: 0.0dB	TOTAL 2 FILTER : S3 TYPE : ACC CAL. F.: 0.0dB
TOTAL 3 FILTER : PR 3	TOTAL 3 FILTER : S1 TYPE : ACC CAL. F.: 0.0dB	TOTAL 3 FILTER : S2 TYPE : ACC CAL. F.: 0.0dB	TOTAL 3 FILTER : S3 TYPE : ACC CAL. F.: 0.0dB

TOTAL x windows; the weighting filters selection in VM

6.2.4.1 Selecting the type of the spectrum in VM to be presented - TYPE

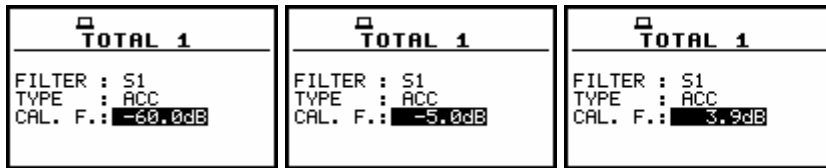
In the **TYPE** three options are available: **ACC** (acceleration), **VEL** (velocity) and **DIL** (displacement). The selection is made by <◀>, <▶> push-buttons and pressing <ENTER> to confirm.



TOTALx windows; the TYPE selection

6.2.4.2 Setting the calibration factor for the presented spectrum in VM - CAL. F.

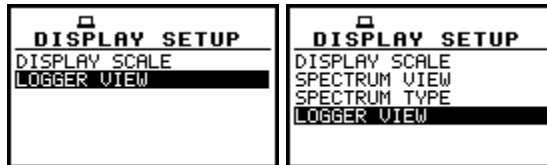
In the **CAL. F.** the user can introduce CALIBRATION FACTOR value from -60.0 dB to 60.0 dB using <◀>, <▶> push-buttons with 0.1 dB step, or using <◀>, <▶> push-buttons with the <SHIFT> with 1 dB step. In order to confirm all changes made in this window the user has to press the <ENTER>. After pressing <ESC> the settings made there are ignored and the instrument returns to the **TOTAL VALUES** window.



TOTALx windows; CALIBRATION FACTOR setting

6.2.5 Setting the parameters of the logger files presentation - LOGGER VIEW

The **LOGGER VIEW** enables the user to change the shape of the graphical presentation and a **TIME** parameter. In order to enter this window one has to press the <ENTER> push-button on the inversely displayed **LOGGER VIEW** text of the **DISPLAY SETUP** sub-list. The **LOGGER VIEW** window is closed and the instrument returns to the **DISPLAY SETUP** sub-list after pressing the <ESC> (the settings made there are not confirmed) or the <ENTER> push-button (the settings are confirmed).



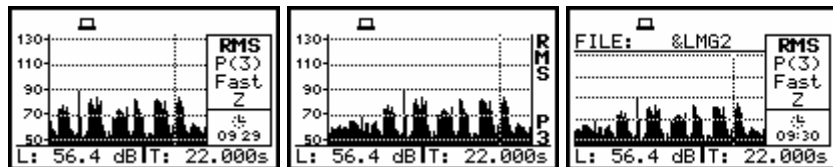
DISPLAY SETUP windows, the LOGGER VIEW text highlighted

6.2.5.1 Selecting the shape of the graphical presentation - VIEW



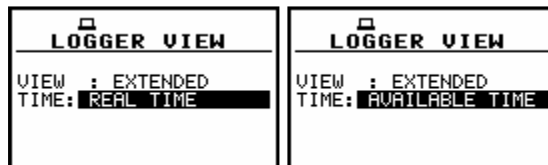
LOGGER VIEW windows with the possible values of the VIEW parameter

The **VIEW** enables the user to select the shape of the graphical mode presentation. Three different views are available which are called as **NORMAL**, **FULL** and **EXTENDED**. The selection is made by means of <◀>, <▶> push-buttons and pressing the <ENTER> for the confirmation. The user can achieve the same effect after pressing the <ALT> and <^> or the <ALT> and <v> push-buttons.



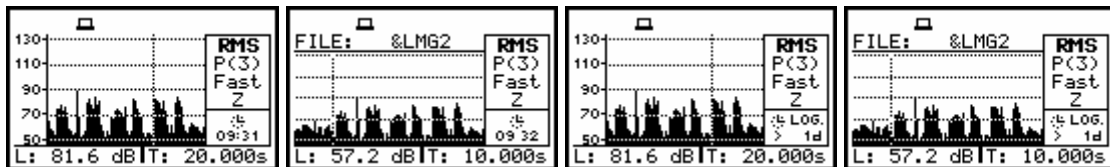
Displays with the possible values of the VIEW parameter

6.2.5.2 Setting the time to be presented - TIME



LOGGER VIEW windows with the possible values of the TIME parameter

The **TIME** enables the user to select the time to be presented with the logger's file results. The **REAL TIME** selection means that on the display the real time is visible, while **AVAILABLE TIME** means that time after which the logger's memory will be filled up by the current measurement result is given there. The selection is made using the <◀>, <▶> push-buttons and pressing the <ENTER> for the confirmation.



Displays with the possible values of the TIME parameter

6.3 Selection of the logger's file to the display presentation - LOGGER VIEW

The **LOGGER** enables the user to examine the contents of the logger files. In order to open this window the user has to press the <ENTER> push-button when the **LOGGER VIEW** text is displayed inversely.



DISPLAY list; the **LOGGER VIEW** text highlighted

In the first line the available still logger's memory is displayed followed by:

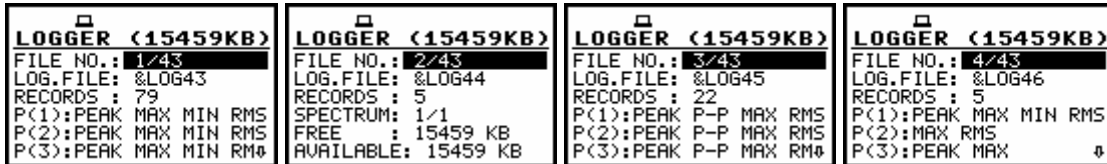
- The selected number of the logger's file and the number of all saved files (**FILE NO.:**).
- The name of the logger's file (**LOG.FILE:**).
- The number of the records in the file, which name is displayed in the previous line (**RECORDS:**).
- The results saved (if any are present) in the logger from the first profile (**P(1):**).
- The results saved (if any are present) in the logger from the second profile (**P(2):**).
- The results saved (if any are present) in the logger from the third profile (**P(3):**).
- The type of spectrum (if 1/1 OCTAVE , 1/3 OCTAVE or FFT).
- The size of the remaining free memory for logger files (**FREE:**).

- The size of the available memory for logger file (**AVAILABLE**:).



Displays in the LOGGER VIEW sub-list

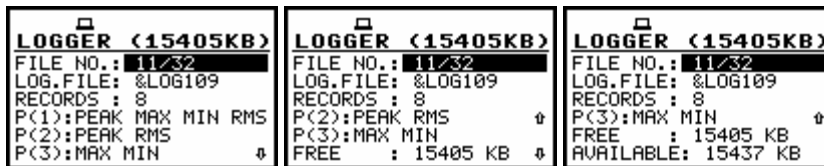
The change of the number of the logger's file is done by pressing the <◀>, <▶> push-buttons.



Displays in the LOGGER VIEW sub-list; the selection of the file to be seen

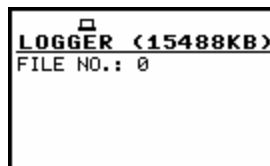
The size of the **FREE** memory for logger files is equal to the size of the **AVAILABLE** memory for logger file in the case when the logger files were not deleted from the memory. If it has happened, the **FREE** memory is always smaller than **AVAILABLE**.

In order to increase the free memory space and achieve the available one, the user has to perform the defragmentation (*path: MENU / FILE / DEFRAGMENTATION / LOGGER DEFRAGMENT.*).



Displays in the LOGGER VIEW sub-list; the scrolling of the file to be seen

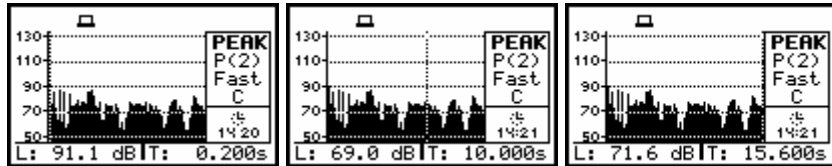
The display of the instrument after entering the **LOGGER VIEW** looks as on the figure below in the case when the logger's file does not exist (there was no measurement or the measurements were performed but with the settings **LOGGER: Off** (*path: MENU / INPUT / MEASUREMENT SETUP*)).



Display in the LOGGER VIEW sub-list in the case when the files do not exist

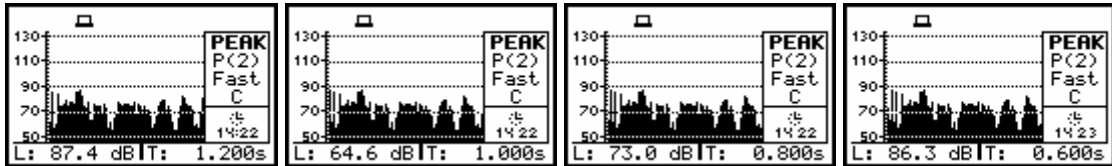
The contents of the selected logger's file is displayed after pressing the <ENTER> push-button. The cursor position is changed after pressing the <◀>, <▶> push-buttons. The left end of the graphical presentation is reached immediately after pressing the <SHIFT> and <◀> while the right end - after pressing the <SHIFT> and <▶> push-buttons.

The type of the registered result, the number of the profile the result is coming from, the related time from the beginning of the registration, the value with the units and the indicator of the filter are presented in the **NORMAL** and **EXTENDED** logger's view mode on the right side of the display.



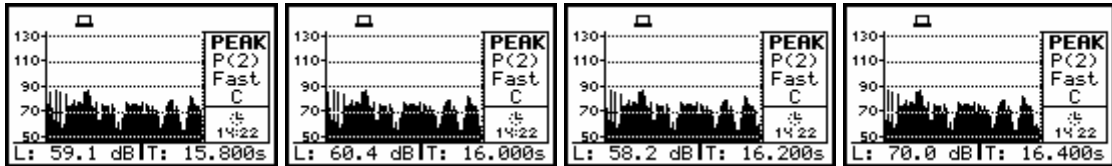
Displays with the selected logger's file; the change of the cursor position

The scrolling of the display to the right is made when the cursor is at the left end of the graphical presentation space and the <▲> push-button is still pressed and in the file there are still the results.



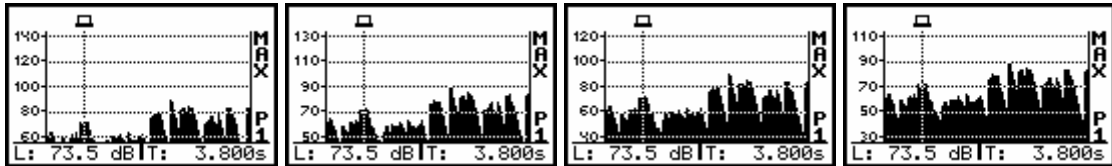
Displays with the selected logger's file; the scrolling to the right

The scrolling of the display to the left is made when the cursor is at the right end of the graphical presentation space and the <▶> push-button is still pressed and in the file there are still the results.



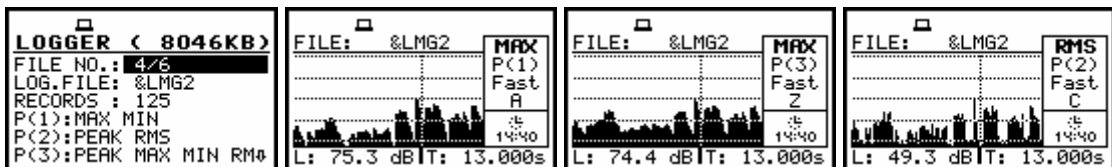
Displays with the selected logger's file; the scrolling to the left

The position of the horizontal axis in relation to the vertical one can be changed after pressing the <▲>, <▼> push-buttons together with the <SHIFT> one.



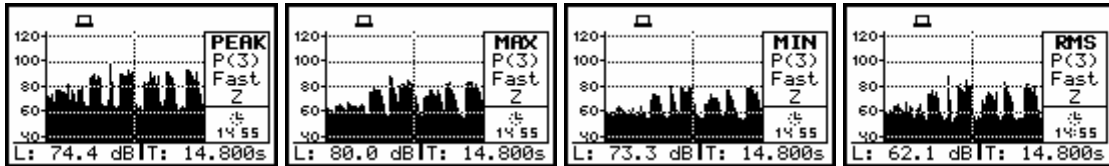
Displays with the selected logger's file; the change of the axis relation

The results from logger's file, coming from different profiles, are changed after pressing the <▲> or <▼> push-buttons – after each pressing the result from the next profile is displayed.



Displays with the selected logger's file; the change of the profile

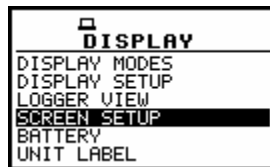
The results from logger's file, coming from the same profile, are displayed after each pressing of the <ALT> and <▲> or <ALT> and <▶> push-buttons.



Displays with the selected logger's file; the change of the result from a profile

6.4 Setting the parameters of the display - SCREEN SETUP

The **SCREEN SETUP** window enables the user to set the proper contrast of the display and switch on the backlight's automatic switch off after a certain period (30 seconds). In order to enter the window one has to press the **<ENTER>** push-button on the inversely displayed **SCREEN SETUP** text of the **DISPLAY** list. The **SCREEN SETUP** window is closed and the instrument returns to the **DISPLAY** list after pressing the **<ESC>** or the **<ENTER>** push-button.



DISPLAY list; the SCREEN SETUP text highlighted

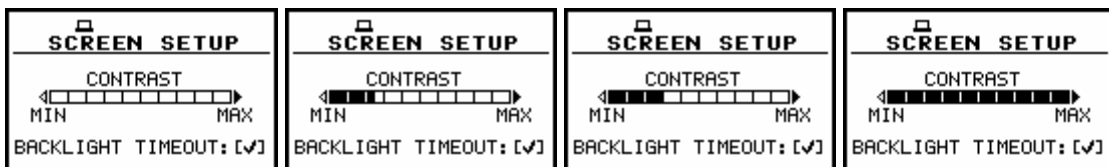
6.4.1 Setting the contrast of the display - CONTRAST

The **CONTRAST** enables the user to set the proper contrast of the display (by means of the **<◀>**, **<▶>** push-buttons). The position is opened after pressing the **<ENTER>** push-button on the highlighted (displayed inversely) **CONTRAST** text. The user can select 21 different values of this parameter.



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

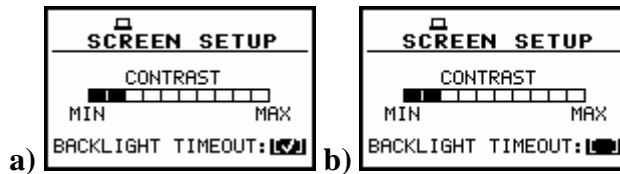
The window is closed and the instrument returns to the **DISPLAY** list after pressing the **<ESC>** or **<ENTER>** push-button.



SCREEN SETUP windows; the change of the contrast

6.4.2 Automatic switch off of the backlight - BACKLIGHT TIMEOUT

Taking into account the saving of the internal source of the instrument's power the backlight should be used relatively rare. It is possible to set the backlight's automatic switch off. In the case when this option is set, after 30 seconds from pressing **any push-button** the backlight is switched off. If it happened, the first pressing of any push-button would cause the switch on of the backlight. The confirmation of the selection is made by pressing the **<ENTER>** push-button. The return without taking into account any change is made after pressing the **<ESC>** push-button.



SCREEN SETUP windows; the BACKLIGHT TIMEOUT active (a), and not active (b)

6.5 Checking the state of the internal battery - BATTERY

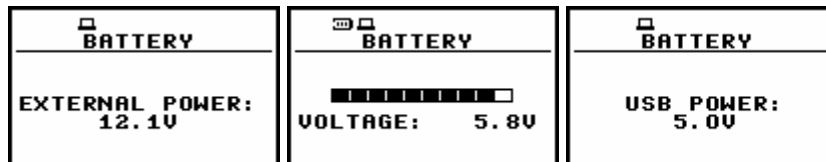
The **BATTERY** enables the user to check the internal battery condition. In order to enter the window one has to press the <ENTER> push-button on the inversely displayed **BATTERY** text of the **DISPLAY** list.

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



DISPLAY list; the BATTERY text highlighted

The instrument can be powered from the external power supplier, from the external battery pack, from four AA rechargeable or standard batteries or from the USB interface when its USB Device socket is connected by means of the cable to a PC. The view presented on the display for each of three kinds of powering sources is different. The current battery voltage is displayed together with its approximate state (in the graphical form).



BATTERY windows for different sources powering the instrument

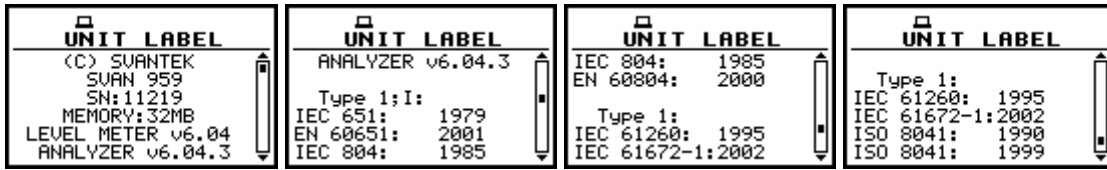
6.6 Checking specification of the instrument - UNIT LABEL

The **UNIT LABEL** enables the user to check the type of the instrument, its serial number, the current software versions installed in it and the standards, which the instrument fulfils. In order to enter the list one has to press the <ENTER> push-button on the inversely displayed **UNIT LABEL** text of the **DISPLAY** list. The **UNIT LABEL** sub-list is closed and the instrument returns to the **DISPLAY** list after pressing the <ESC> or the <ENTER> push-button.



DISPLAY list; the UNIT LABEL text highlighted

After pressing the <◀>, <▶> (or <▲>, <▼>) push-buttons the displayed text is scrolled on the display and the user can check the number of the standard fulfilled by the instrument and the current revision of the software used in the PIC processor of the instrument. The window is closed and the instrument returns to the **DISPLAY** list after pressing the <ESC> or <ENTER> push-button.



UNIT LABEL windows opened and after scrolling with the <▲>, <▼> push-buttons



Notice: The contents of the **UNIT LABEL** should be always transmitted to the Svantek's service in the case of any problems faced by the user during the instrument's operation.