

8 REPORTS PRINTING - REPORT

The printed reports of the sound or vibration measurement results in the predefined format can be obtained by means of the **REPORT** list. In order to open the **REPORT** list the user has to:

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



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

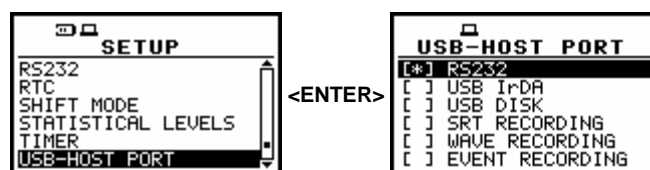
In order to obtain the report the user has to connect the instrument to the printer's RS 232 port using the **SV 55** RS 232 interface. This hardware interface is hidden in the Cannon type, 9-pin RS 232 plug-in. On the other end of the **SV 55** interface, which itself looks like a cable, there is the USB Host plug-in. This plug-in should be placed in the USB Host socket of the instrument.

It is also possible to **connect the instrument to the USB port** of a PC using the proper cable. Measurement results can be easy **downloaded to any PC (using USB interface and SvanPC software)** and printed out on the printer attached to a PC.



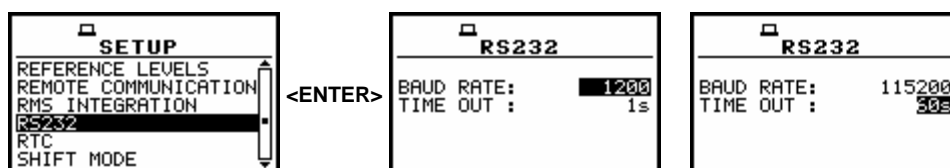
Notice: The converter **SV 55** serves as the RS 232 interface. The **SV 55** connection to the **USB Host** socket is detected and after successful detection the headphone icon is switched on. The transmission using the **SV 55** is possible only in the case when the instrument is not connected to a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

The **RS232** is the default setting in the **USB-HOST PORT** in the **SETUP** list. Only in this option the USB host controller is awoken and the power consumption is the lower one.



SETUP list with **USB-HOST PORT** selected and this window with the activated **RS232**

The user has to be sure that the **RS232** is activated (*path: MENU / SETUP / USB-HOST PORT / RS232*) before starting printing reports. Additionally, in the **RS232** list (*path: MENU / SETUP / RS232*) the user has to select the proper speed of the transmission and the parameter called **TIME OUT**.



SETUP list with **RS232** selected and the exemplary contents of this window

The RS 232 interface transmission (**BAUD RATE**) speed can be selected from the following available values: **1200** (bits / second), **2400** (bits / s), **4800** (bits / s), **9600** (bits / s), **19200** (bits / s), **38000** (bits / s), **57600** (bits / s) or **115200** (bits / s).

The selection is made by means of the <<>, <>> push-buttons. The transmission speed should correspond to the one selected in a printer. The other RS 232 transmission parameters are fixed to **8 bits for data, No parity & 1 Stop bit**. The default value of the **TIME OUT** parameter is equal to one but it can be too short period for the printers, which are not too fast. In such case, this parameter has to be increased.

The description of the **SV 55** pin-outs is given in App. C. The printers with the different connections on the RS 232 socket require the special, individual RS 232 – RS 232 cable that should fulfil the suitable wire crossing.

The printers, in which the Centronics interface is available instead of the RS 232 one, can be connected to the instrument by means of the **SV 52** RS 232 – Centronics interface.

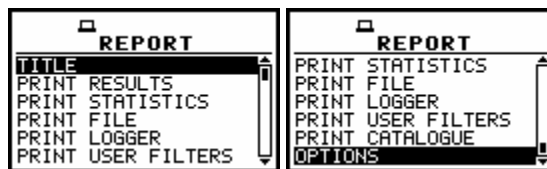
The printers, which have only USB interface, are currently not driven by the instrument.



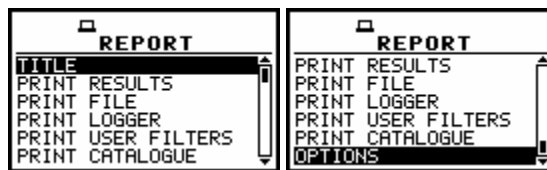
Notice: Switch the power off before connecting the instrument to any external device (e.g. a printer or a Personal Computer).

The **REPORT** list contains the following elements:


- TITLE** that enables the user to give the header to the printed report;
- PRINT RESULTS** that enables the user to print out the measurement results on the default printer or to send the measurement results to a PC using SvanPC software and USB interface;
- PRINT STATISTICS** that enables the user to print out the statistics of the measurement results; this position is not available in the case of vibration measurements;
- PRINT FILE** that enables the user to print out on a printer the selected file with the measurement results or to send it to a PC using SvanPC software and USB interface
- PRINT LOGGER** that enables the user to print out on a printer connected directly to the instrument the measurement results in a selected file from the logger or to send it to a PC using SvanPC software and USB interface
- PRINT USER FILTERS** that enables the user to print out on a printer connected directly to the instrument the values of the user filters introduced in the instrument or to send them to a PC using SvanPC software and USB interface;
- PRINT CATALOGUE** that enables the user to print out the catalogue of the files
- OPTIONS** that enables the user to determine the options of the report.




REPORT windows in SM (SOUND METER) mode



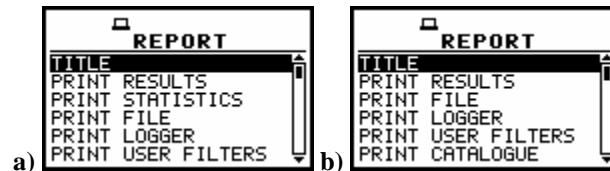
REPORT windows in the vibration mode

 **Notice:** All reports are printed in the character format using the ASCII set.

 **Notice:** The abbreviation **SM** mode refers to the **SOUND METER** mode, **VM** mode refers to the **VIBRATION METER** mode.

8.1 Edition of the user's text to be added to the reports - TITLE

The **TITLE** enables the user to edit the text added to the file and to the report to be printed. This operation is performed in the same way as it was described in the case of the **FILE NAME** window. In order to enter the position the user has to select the **TITLE** text in the **REPORT** list, using the **<▲>**, **<◀>** (or **<▲>**, **<◀>** with **<SHIFT>**) push-buttons and press the **<ENTER>** one.



REPORT windows with TITLE selected in SM (a) and VM (b)

The text edition is made using the **<▲>**, **<▼>**, **<◀>**, **<▶>** and **<SHIFT>** push-buttons. The **<◀>**, **<▶>** push-buttons are used for changing the position of the edited character. The number (counted from the beginning of the text) of the edited character is displayed in the first line of the display, in the brackets. The text is limited to 128 characters.



Displays in the text edition of the report's header

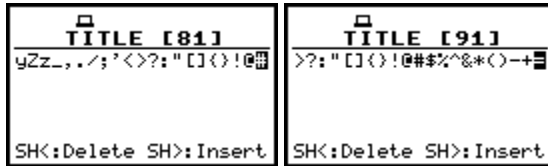
The **<▲>**, **<▼>** push-buttons are used for the selection of the ASCII characters. Digits, small and big letters as well as special characters, all together 91, are available (cf. the view of the displays below). Small and big letters are placed one after another.

Pressing the **<SHIFT>** and **<◀>** push-buttons causes that the highlighted character is erased from the text (**DEL** function). Pressing the **<SHIFT>** and **<▶>** causes that the whole text is shifted one position to the right (**INSERT** function).

The window is closed and the instrument returns to the **REPORT** list after pressing the **<ENTER>** or **<ESC>** push-button. In the first case, the edited text is saved and will be added to the printed reports. In the latter case newly introduced text or the amendments made in the old one are ignored.



Displays with all available characters

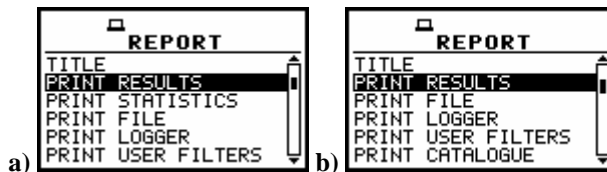


Displays with all available characters (cont.)

8.2 Printing of the measurement results - PRINT RESULTS

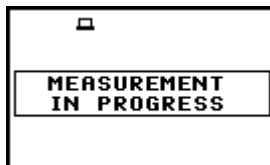
The **PRINT RESULTS** enables the user to print the report on the attached printer or to send out the report to a PC using the SvanPC software and the USB interface.

In order to enter the position the user has to select the **PRINT RESULT** text in the **REPORT** list, using the <▲>, <▼> (or <<<>, <>>>) push-buttons and press the <ENTER> one.



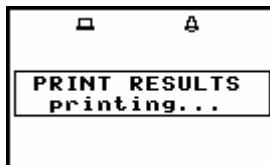
REPORT windows with PRINT RESULTS selected in SM (a) and VM (b)

After pressing the <ENTER> push-button the instrument checks its current state. In the case when the measurements are performed, the printing is impossible and the message is displayed.



Display after the attempt to perform an unavailable operation during measurement in progress

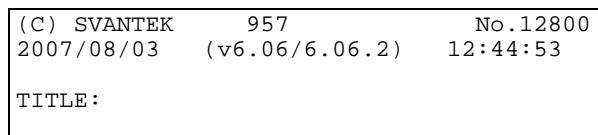
In the case when a measurement was already performed and a result is available, the message presented below is displayed.



Display in REPORT list; the execution of PRINT RESULTS

When the message is on the display, the data are transferred from the instrument to the attached printer. The instrument returns to the **REPORT** list after transferring all data.

The exemplary report printed in A5 format (*path: MENU / REPORT / OPTION / FORMAT A5*) with the **TITLE** "13MAR" (*path: MENU / REPORT / TITLE / 13MAR*) looks as follows:



```

----- SETTINGS -----
Device mode.....: SOUND METER
Input.....: Microphone
Field correction...: FREE
Outdoor filter.....: Off
Device function....: LEVEL METER
LEVEL METER version: 6.06
Meas. start date...: 2007/08/03
Meas. start hour...: 12:42:04
Range.....: HIGH
Measure trigger....: Off
Logger trigger.....: Off
Repeat cycle.....: 2
Start delay.....: 1 s
Integration time...: 10 s
Calibr. factor.....: 6.6 dB
Calibration by.....: Measurement
Calibration date...: 2007/08/03
Calibration hour...: 12:39:58
Leq integration....: Linear

Profile:      #1      #2      #3
Filter:       A       C       Z
Detector:    FAST    FAST    FAST
Logger:      None    None    None

----- RESULTS -----

Measurement time: 00:00:10

Prof.:      #1      #2      #3
PEAK    63.7dB    68.9dB    76.3dB
MAX     48.5dB    56.1dB    70.7dB
MIN     41.8dB    50.2dB    58.1dB
SPL     48.5dB    55.9dB    67.9dB
LEQ     44.0dB    53.0dB    64.8dB
SEL     54.0dB    63.0dB    74.8dB
Ld      44.0dB    53.0dB    64.8dB
LEPd    44.0dB    53.0dB    64.8dB
Ltm3    46.2dB    55.4dB    69.3dB
Ltm5    47.5dB    55.6dB    69.5dB

L01     49.5dB    56.5dB    72.5dB
L10     45.3dB    54.7dB    68.1dB
L20     44.6dB    54.0dB    66.7dB
L30     44.2dB    53.5dB    65.4dB
L40     43.8dB    53.1dB    64.4dB
L50     43.5dB    52.7dB    63.4dB
L60     43.2dB    52.3dB    62.4dB
L70     43.0dB    51.9dB    61.4dB
L80     42.6dB    51.4dB    60.2dB
L90     42.2dB    51.0dB    58.0dB

-----

```

Example of the printed results - A5 format

The same result's report printed in A4 format is presented below:

```

(C) SVANTEK      957      No.12800 2007/08/03      (v6.06/6.06.2)      12:42:54

TITLE:

----- SETTINGS -----      ----- SETTINGS -----

Device mode.....: SOUND METER

```

```

Input.....: Microphone
Field correction...: FREE
Device function...: LEVEL METER
Meas. start date...: 2007/08/03
Range.....: HIGH
Logger trigger....: Off
Start delay.....: 1 s
Calibr. factor....: 6.6 dB
Calibration date...: 2007/08/03
Leq integration...: Linear

Outdoor filter.....: Off
LEVEL METER version: 6.06
Meas. start hour...: 12:42:04
Measure trigger...: Off
Repeat cycle.....: 2
Integration time...: 10 s
Calibration by....: Measurement
Calibration hour...: 12:39:58

Profile:      #1      #2      #3
Filter:       A       C       Z
Logger:      None    None   None

Profile:      #1      #2      #3
Detector:    FAST    FAST    FAST

----- RESULTS -----

Measurement time: 00:00:10

Prof.:      #1          #2          #3
PEAK       63.7 dB      68.9 dB      76.3 dB
MAX        48.5 dB      56.1 dB      70.7 dB
MIN        41.8 dB      50.2 dB      58.1 dB
SPL        48.5 dB      55.9 dB      67.9 dB
LEQ        44.0 dB      53.0 dB      64.8 dB
SEL        54.0 dB      63.0 dB      74.8 dB
Ld         44.0 dB      53.0 dB      64.8 dB
LEPd       44.0 dB      53.0 dB      64.8 dB
Ltm3       46.2 dB      55.4 dB      69.3 dB
Ltm5       47.5 dB      55.6 dB      69.5 dB

L01        49.5 dB      56.5 dB      72.5 dB
L10        45.3 dB      54.7 dB      68.1 dB
L20        44.6 dB      54.0 dB      66.7 dB
L30        44.2 dB      53.5 dB      65.4 dB
L40        43.8 dB      53.1 dB      64.4 dB
L50        43.5 dB      52.7 dB      63.4 dB
L60        43.2 dB      52.3 dB      62.4 dB
L70        43.0 dB      51.9 dB      61.4 dB
L80        42.6 dB      51.4 dB      60.2 dB
L90        42.2 dB      51.0 dB      58.0 dB
    
```

Example of the printed results from SOUND METER mode (LEVEL METER) - A4 format

```

(C) SVANTEK      957                No.12800 2007/08/03      (v6.06/6.06.2) 12:50:42

TITLE:

----- SETTINGS -----

Device mode.....: VIBR. METER
Input.....: Accelerometer
Device function...: 1/3 OCTAVE
Meas. start date...: 2007/08/03
Range.....: LOW
Ref.level for Vel.: 1 nm/s
Measure trigger...: Off
Repeat cycle.....: 1
Integration time...: 1 m
Calibration by....: Measurement
Calibration hour...: 12:39:58
Spectrum filter...: Z

Meas. start hour...: 12:47:02
Ref.level for Acc.: 1 um/s2
Ref.level for Dil.: 1 pm
Logger trigger....: Off
Start delay.....: 1 s
Calibr. factor....: 0.0 dB
Calibration date...: 2007/08/03
RMS integration...: Linear
Spectrum in logger.: None

Profile:      #1      #2      #3
Filter:       HP1    HP3    HP10
Logger:      None    None   None

Profile:      #1      #2      #3
Detector:    1.0s  1.0s  1.0s
    
```

```

----- RESULTS -----
Measurement time: 00:01:00

Prof.:      #1          #2          #3
PEAK       813 mm/s2    767 mm/s2    653 mm/s2
P-P        1.57 m/s2     1.38 m/s2     1.14 m/s2
MAX        412 mm/s2    266 mm/s2    160 mm/s2
RMS        151 mm/s2    100 mm/s2     58.9 mm/s2
VDV        653 mm/s1.75  442 mm/s1.75  292 mm/s1.75

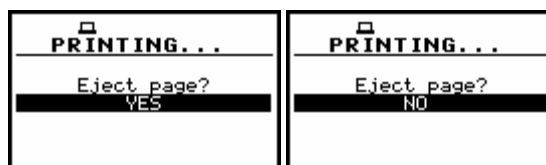
--- 1/3 OCTAVE ---      --- 1/3 OCTAVE ---      --- 1/3 OCTAVE ---
[Hz]  [m/s2]              [Hz]  [m/s2]              [Hz]  [m/s2]
0.80  4.90e-02            25.00 7.50e-03            800.00 3.16e-03
1.00  5.82e-02            31.50 1.72e-02         1000.00 3.02e-03
1.25  6.17e-02            40.00 1.15e-02         1250.00 2.79e-03
1.60  8.32e-02            50.00 9.02e-03         1600.00 2.66e-03
2.00  5.89e-02            63.00 6.46e-03         2000.00 1.93e-03
2.50  5.07e-02            80.00 4.27e-03         2500.00 1.30e-03
3.15  3.98e-02           100.00 5.19e-03         3150.00 1.01e-03
4.00  3.35e-02           125.00 5.82e-03         4000.00 8.32e-04
5.00  3.72e-02           160.00 3.76e-03         5000.00 7.50e-04
6.30  2.63e-02           200.00 7.24e-03         6300.00 5.69e-04
8.00  2.37e-02           250.00 5.96e-03         8000.00 4.62e-04
10.00 3.13e-02           315.00 4.95e-03         10000.00 3.98e-04
12.50 2.79e-02           400.00 4.62e-03         12500.00 3.55e-04
16.00 1.05e-02           500.00 5.82e-03         16000.00 3.16e-04
20.00 6.84e-03           630.00 3.39e-03         20000.00 3.59e-04

----- TOTALS FOR FILTERS -----
Filter Type  CF[dB]  Total
R3          Acc    0.0  1.78e-01 m/s2
HP3         Acc    0.0  1.00e-01 m/s2
HP10        Acc    0.0  5.89e-02 m/s2

```

Example of the printed results from VIBRATION METER mode (1/3 OCTAVE) - A4 format

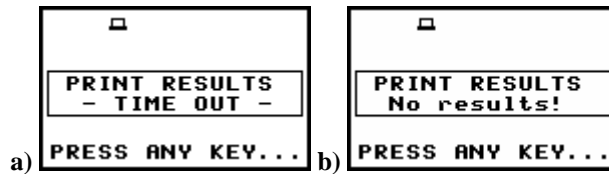
The following confirmation question is displayed after the printing, if the **Prompt** parameter was selected in the **EJECT P.** (*path: MENU / REPORT / OPTIONS / EJECT P.*). The user has to answer in this case if the paper in the printer has to be ejected to the new page. The change of the available answers is possible after pressing the **<<>**, **>>** push-buttons. The return to the **REPORT** list is performed after pressing the **<ENTER>** push-button with the possible ejection of the paper to the new page.



Displays with the confirmation request of the paper ejection

The similar message is displayed after sending out the statistics of the results, the contents of the selected file, the contents of the selected file in the logger and the catalogue of the files (**PRINT STATISTICS**, **PRINT FILE**, **PRINT LOGGER**, **PRINT USER FILTERS** and **PRINT CATALOGUE**).

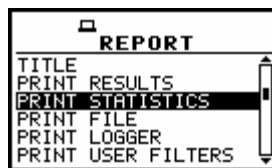
The message about the time limit is displayed in the case when the printer (or a PC) is not connected or there is any other reason that it does not receive the data. The instrument waits for the reaction of the user (any push-button should be pressed except the **<SHIFT>** and **<ALT>** one) and after pressing a push-button it returns to the **REPORT** list. Another message is presented and the instrument waits for the reaction of the user in the case when there is no data to be printed.



Displays during the results printing when there is no transfer (a) and no data (b)

8.3 Printing of the statistics of sound measurement results - PRINT STATISTICS

The **PRINT STATISTICS** enables the user to print the results of the statistics analysis on the attached printer. This position is not accessible for the vibration measurements. In order to enter the position the user has to select the **PRINT STATISTICS** text in the **REPORT** list, using the <▲>, <▼> (or <◀>, <▶>) push-buttons and press the <ENTER>.



REPORT window with **PRINT STATISTICS** selected

After pressing the <ENTER> push-button the instrument checks its current state. In the case when the measurements are performed, the printing is impossible and the message is displayed.



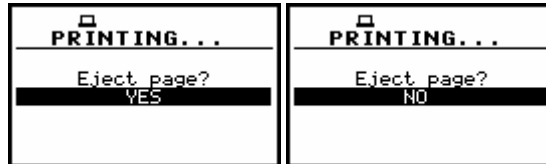
Display after the attempt to perform an unavailable operation during measurement in progress

After pressing the <ENTER> push-button, in the case when a measurement was already performed and a result is available, the message is displayed:



Display in **REPORT** list; the execution of **PRINT STATISTICS**

When the message is on the display, the data are transferred from the instrument to the attached printer (or PC). The instrument returns to the **REPORT** list when all data are transferred but if the **Prompt** parameter was selected in the **EJECT P.** (*path: MENU / REPORT / OPTIONS / EJECT P.*), the confirmation question is displayed after the printing. The user has to answer in this case if the paper in the printer has to be ejected to the new page. The change of the available answers is possible after pressing the <◀>, <▶> push-buttons. The return to the **REPORT** list is performed after pressing the <ENTER> push-button with the possible ejection of the paper to the new page.



Displays with the confirmation request of the paper ejection

The printed statistics examples (format A5 and A4) are presented below:

```
(C) SVANTEK      957      No.12800
2007/08/03      (v6.06/6.06.2)  13:27:14

TITLE:

----- SETTINGS -----

Device mode.....: SOUND METER
Input.....: Microphone
Field correction...: FREE
Outdoor filter.....: Off
Device function...: LEVEL METER
LEVEL METER version: 6.06
Meas. start date...: 2007/08/03
Meas. start hour...: 13:09:54
Range.....: LOW
Measure trigger...: Off
Logger trigger.....: Off
Repeat cycle.....: 1
Start delay.....: 1 s
Integration time...: 1 m
Calibr. factor.....: 6.6 dB
Calibration by.....: Measurement
Calibration date...: 2007/08/03
Calibration hour...: 12:39:58
Leq integration....: Linear

Profile:      #1      #2      #3
Filter:       A       C       Z
Detector:    FAST    FAST    FAST
Logger:      None    None    None

----- STATISTICS -----

Measurement time: 00:01:00

Profile:      #1      #2      #3
              [dB A] [dB C] [dB]
L01          52.6   62.3   87.0
L02          50.6   60.2   85.5
L03          49.4   59.1   84.0
L04          48.0   58.6   83.3
L05          47.3   58.3   82.7
L06          46.8   57.8   82.1
L07          46.5   57.0   81.5
L08          46.3   56.7   80.9
L09          46.0   56.4   80.3
L10          45.8   56.1   79.7
L11          45.7   55.9   79.3
L12          45.5   55.7   78.8
L13          45.4   55.5   78.5
L14          45.2   55.3   78.1
L15          45.1   55.1   77.8
L16          44.9   54.9   77.5
L17          44.8   54.8   77.2
L18          44.7   54.7   77.0
L19          44.6   54.6   76.5
L20          44.5   54.5   76.1
L21          44.4   54.4   75.8
```

L22	44.3	54.3	75.6
L23	44.2	54.2	75.4
L24	44.1	54.1	75.1
L25	44.0	54.0	74.9
L26	43.9	53.8	74.7
L27	43.9	53.7	74.5
L28	43.8	53.6	74.3
L29	43.8	53.5	74.1
L30	43.7	53.4	74.0
L31	43.6	53.3	73.7
L32	43.6	53.2	73.5
L33	43.5	53.1	73.3
L34	43.5	53.0	73.1
L35	43.4	52.9	72.9
L36	43.3	52.8	72.7
L37	43.3	52.7	72.4
L38	43.2	52.6	72.2
L39	43.2	52.6	72.0
L40	43.1	52.5	71.7
L41	43.0	52.4	71.4
L42	43.0	52.3	71.1
L43	42.9	52.2	70.8
L44	42.9	52.1	70.5
L45	42.8	52.0	70.2
L46	42.8	51.9	69.9
L47	42.7	51.9	69.7
L48	42.6	51.8	69.6
L49	42.6	51.7	69.4
L50	42.5	51.6	69.2
L51	42.5	51.5	69.0
L52	42.4	51.5	68.7
L53	42.4	51.4	68.3
L54	42.3	51.3	67.9
L55	42.3	51.2	67.7
L56	42.2	51.1	67.5
L57	42.2	51.1	67.2
L58	42.1	51.0	67.0
L59	42.0	50.9	66.8
L60	42.0	50.9	66.5
L61	41.9	50.8	66.2
L62	41.9	50.7	65.9
L63	41.8	50.7	65.5
L64	41.8	50.6	65.2
L65	41.7	50.5	64.9
L66	41.6	50.5	64.6
L67	41.6	50.4	64.3
L68	41.5	50.4	64.1
L69	41.5	50.3	63.8
L70	41.4	50.2	63.5
L71	41.3	50.2	63.3
L72	41.3	50.1	63.0
L73	41.2	50.0	62.7
L74	41.2	50.0	62.4
L75	41.1	49.9	62.1
L76	41.1	49.8	61.8
L77	41.0	49.7	61.5
L78	40.9	49.7	61.2
L79	40.9	49.6	60.9
L80	40.8	49.5	60.6
L81	40.7	49.4	60.4
L82	40.6	49.3	60.1
L83	40.5	49.2	59.9
L84	40.4	49.1	59.7
L85	40.3	49.1	59.5
L86	40.3	49.0	59.3
L87	40.2	48.8	59.1
L88	40.1	48.7	58.8
L89	40.0	48.5	58.5
L90	39.8	48.3	58.2
L91	39.6	48.2	57.8
L92	39.4	48.0	57.5
L93	39.1	47.8	57.1

L94	38.6	47.6	56.7
L95	37.3	47.4	56.2
L96	35.9	47.2	55.7
L97	35.6	47.0	55.1
L98	35.4	46.3	54.6
L99	35.1	45.4	54.0

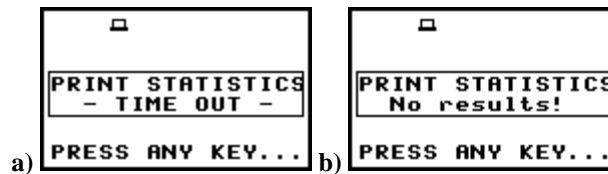
Example of the printed statistics from SOUND LEVEL METER mode - format A5

(C) SVANTEK	957	No.12800	2007/08/03	(v6.06/6.06.2)	14:05:39
TITLE:					
----- SETTINGS -----			----- SETTINGS -----		
Device mode.....:	SOUND METER			Outdoor filter.....:	Off
Input.....:	Microphone			Meas. start hour...:	14:03:56
Field correction...:	FREE			Criterion level.....:	80 dB
Device function....:	DOSE METER			Exchange rate.....:	3 dB
Meas. start date...:	2007/08/03			Measure trigger.....:	Off
Range.....:	LOW			Repeat cycle.....:	1
Threshold level.....:	None			Integration time...:	30 s
Exposure time.....:	08h00			Calibration by.....:	Measurement
Logger trigger.....:	Off			Calibration hour...:	12:39:58
Start delay.....:	1 s				
Calibr. factor.....:	6.6 dB				
Calibration date...:	2007/08/03				
Leq integration.....:	Linear				
Profile:	#1	#2	#3	Profile:	#1 #2 #3
Filter:	A	C	Z	Detector:	FAST FAST FAST
Logger:	None	None	None		
----- STATISTICS -----			----- STATISTICS -----		
Measurement time: 00:00:30					
Profile:	#1	#2	#3	Profile:	#1 #2 #3
	[dB A]	[dB C]	[dB]		[dB A] [dB C] [dB]
L01	56.5	59.9	71.0	L51	48.7 54.8 61.3
L02	55.8	59.6	70.2	L52	48.6 54.7 61.3
L03	55.5	59.3	69.3	L53	48.5 54.7 61.2
L04	55.2	59.0	68.7	L54	48.5 54.6 61.1
L05	54.9	58.8	68.3	L55	48.4 54.5 61.0
L06	54.6	58.7	68.0	L56	48.3 54.5 61.0
L07	54.3	58.6	67.4	L57	48.3 54.4 60.9
L08	54.0	58.5	66.9	L58	48.2 54.3 60.8
L09	53.8	58.3	66.7	L59	48.1 54.2 60.7
L10	53.7	58.2	66.5	L60	48.1 54.2 60.6
L11	53.5	58.1	66.3	L61	48.0 54.1 60.5
L12	53.4	58.0	66.1	L62	47.9 54.0 60.4
L13	53.2	57.9	65.9	L63	47.8 54.0 60.3
L14	53.1	57.8	65.7	L64	47.8 53.9 60.2
L15	52.9	57.7	65.6	L65	47.7 53.8 60.1
L16	52.8	57.6	65.4	L66	47.6 53.7 60.0
L17	52.7	57.5	65.3	L67	47.5 53.6 59.9
L18	52.6	57.4	65.1	L68	47.5 53.5 59.8
L19	52.4	57.3	65.0	L69	47.4 53.4 59.7
L20	52.3	57.2	64.8	L70	47.3 53.3 59.7
L21	52.2	57.2	64.7	L71	47.2 53.3 59.6
L22	52.1	57.1	64.5	L72	47.1 53.2 59.5
L23	52.0	57.0	64.4	L73	47.1 53.1 59.4
L24	51.8	56.9	64.2	L74	47.0 53.0 59.3
L25	51.6	56.8	64.1	L75	46.9 52.9 59.3
L26	51.5	56.7	63.9	L76	46.8 52.8 59.2
L27	51.3	56.7	63.8	L77	46.8 52.8 59.1
L28	51.2	56.6	63.7	L78	46.7 52.7 59.0
L29	51.0	56.5	63.6	L79	46.6 52.6 59.0

L30	50.9	56.4	63.5	L80	46.5	52.6	58.8
L31	50.8	56.3	63.4	L81	46.5	52.5	58.7
L32	50.7	56.3	63.3	L82	46.4	52.4	58.5
L33	50.6	56.2	63.2	L83	46.3	52.4	58.4
L34	50.5	56.1	63.1	L84	46.3	52.3	58.2
L35	50.4	56.0	63.0	L85	46.2	52.2	58.1
L36	50.3	56.0	62.8	L86	46.1	52.2	58.0
L37	50.2	55.9	62.7	L87	46.0	52.1	57.8
L38	50.1	55.8	62.6	L88	46.0	52.0	57.6
L39	50.0	55.7	62.5	L89	45.9	52.0	57.4
L40	49.8	55.6	62.3	L90	45.7	51.8	57.2
L41	49.7	55.6	62.2	L91	45.6	51.7	57.0
L42	49.6	55.5	62.1	L92	45.5	51.6	56.7
L43	49.5	55.4	62.0	L93	45.3	51.5	56.5
L44	49.3	55.3	61.9	L94	45.2	51.3	56.2
L45	49.2	55.2	61.8	L95	45.1	51.2	56.0
L46	49.1	55.2	61.7	L96	45.0	51.1	55.6
L47	49.0	55.1	61.6	L97	44.6	51.0	55.2
L48	48.9	55.0	61.6	L98	44.2	50.6	54.8
L49	48.8	54.9	61.5	L99	43.6	50.2	54.4
L50	48.7	54.9	61.4				

Example of the printed statistics from SOUND METER mode (DOSE METER) - format A4

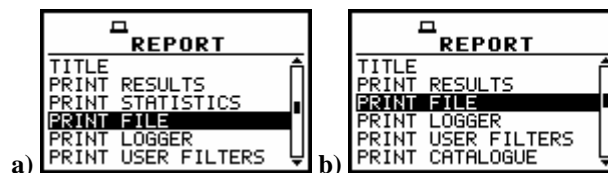
The message about the time limit is displayed in the case when the printer is not connected or there is any other reason that it does not receive the data. The instrument waits for the reaction of the user (any push-button should be pressed except the <SHIFT> and <ALT>) and after pressing a push-button it returns to the **REPORT** list. Another message is presented and the instrument waits for the reaction of the user in the case when there is no data to be printed.



Displays during the statistics printing when there is no transfer (a) and no data (b)

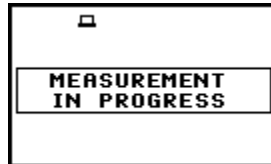
8.4 Printing of the measurement results from the selected file - PRINT FILE

The **PRINT FILE** enables the user to print out on a printer connected directly to the instrument the selected file with the measurement results or to send it to a PC using SvanPC software and the USB interface. In order to enter the position the user has to select the **PRINT FILE** text in the **REPORT** list, using the <▲>, <▼> (or <<<>, <>>>) push buttons and press the <ENTER>.



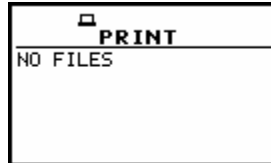
REPORT windows with PRINT FILE selected in SM (a) and VM (b)

After pressing the <ENTER> push-button the instrument checks its current state. In the case when the measurements are performed, the printing is impossible and the message is displayed.



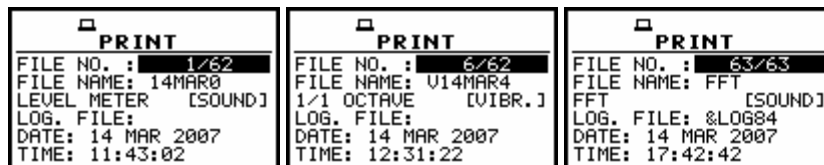
Display after the attempt to perform an unavailable operation during measurement in progress

If no files were saved in the instrument's memory then after pressing **<ENTER>** a special message is displayed and the unit waits for the reaction of the user. In this time any push-button should be pressed except the **<SHIFT>** and **<ALT>** one and after pressing a push-button the instrument returns to the **REPORT** list.



Display in **REPORT** list; **PRINT FILE** position when no files were saved

In the consecutive lines of the display the current file number, the total number of the files, the file name, file type, date and time of registration are presented. The change of the current file with the unit step can be done pressing the **<<>**, **<>>** push-buttons. After pressing the **<<>** with **<SHIFT>** push-button the first file is available and after pressing the **<>>** with **<SHIFT>** push-button - the last one is displayed.



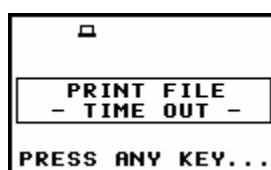
Displays during the selection of the file to be printed

The contents of the selected file is sent out to a PC after pressing the **<ENTER>** push-button. The following message is displayed on the display during the printing:



Display during the execution of **PRINT FILE** operation

The instrument returns to the **REPORT** list when all data are transferred but if the **Prompt** parameter was selected (*path: MENU / REPORTS / OPTIONS / EJECT P. / Prompt*), the described in the **PRINT RESULTS** message is displayed on the display after the printing. The user has to answer in this case if the Line Feed has to be added to the transferred data. The change of the available answers is possible after pressing the **<<>**, **<>>** push-buttons. The return to the **REPORT** list is performed after pressing the **<ENTER>** push-button with the possible Line Feed addition.



Display during the file sending out when there is no data transfer

The message about the time limit is displayed in the case when the printer (or PC) is not connected or there is any other reason that it does not receive the data. The instrument waits for the reaction of the user (any push-button should be pressed except the <SHIFT> and <ALT> one) and it returns to the **REPORT** list after pressing a push-button.

The exemplary printed file contents are presented below.

```
(C) SVANTEK      957      No.12800
2007/08/06      (v6.06/6.06.2)  17:55:35

File name: 06AUG0

TITLE:

----- SETTINGS -----

Device mode.....: VIBR. METER
Input.....: Accelerometer
Device function....: 1/3 OCTAVE
Meas. start date...: 2007/08/06
Meas. start hour...: 17:52:52
Range.....: HIGH
Ref.level for Acc...: 1 um/s2
Ref.level for Vel...: 1 nm/s
Ref.level for Dil...: 1 pm
Measure trigger....: Off
Logger trigger....: Off
Repeat cycle.....: 1
Start delay.....: 1 s
Integration time...: 30 s
Calibr. factor.....: 0.0 dB
RMS integration....: Linear
Spectrum filter....: Z
Spectrum in logger.: None

Profile:      #1      #2      #3
Filter:      HP1      HP3      HP10
Detector:    1.0s    1.0s    1.0s
Logger:      None    None    None

----- RESULTS -----

Measurement time: 00:00:30

Prof.:      #1      #2      #3
PEAK      794mm/s2    525mm/s2    543mm/s2
P-P      1.36 m/s2    1.00 m/s2    989mm/s2
MAX      282mm/s2    150mm/s2    79.4mm/s2
RMS      122mm/s2    93.3mm/s2    62.4mm/s2
VDV      442mm/sX    305mm/sX    204mm/sX

Remark:      X = 1.75

--- 1/3 OCTAVE ---

[Hz]      [m/s2]
0.80      2.04e-02
1.00      3.98e-02
1.25      4.68e-02
1.60      3.98e-02
2.00      2.88e-02
2.50      2.32e-02
3.15      3.02e-02
4.00      3.16e-02
5.00      4.03e-02
6.30      1.70e-02
8.00      2.79e-02
10.00     1.38e-02
12.50     2.85e-02
16.00     1.00e-02
20.00     6.24e-03
```

```

25.00 6.76e-03
31.50 2.16e-02
40.00 1.95e-02
50.00 9.89e-03
63.00 6.76e-03
80.00 4.42e-03
100.00 1.07e-02
125.00 8.71e-03
160.00 5.69e-03
200.00 1.16e-02
250.00 1.12e-02
315.00 6.76e-03
400.00 6.76e-03
500.00 7.76e-03
630.00 5.56e-03
800.00 4.32e-03
1000.00 4.42e-03
1250.00 4.27e-03
1600.00 3.47e-03
2000.00 2.29e-03
2500.00 1.91e-03
3150.00 1.29e-03
4000.00 1.20e-03
5000.00 1.68e-03
6300.00 1.16e-03
8000.00 1.26e-03
10000.00 1.70e-03
12500.00 1.57e-03
16000.00 1.91e-03
20000.00 2.02e-03

----- TOTALS FOR FILTERS -----

Filter Type   CF[dB]   Total
HP1      Acc    0.0    1.32e-01 m/s2
HP3      Acc    0.0    9.33e-02 m/s2
HP10     Acc    0.0    6.24e-02 m/s2

```

Example of the printed file from VIBRATION METER mode (1/3 OCTAVE) - format A5

```
(C) SVANTEK 957 No.12800 2007/08/06 (v6.06/6.06.2) 17:57:59
```

```
File name: 03AUGST
```

```
TITLE:
```

```
----- SETTINGS -----
```

```

Device mode.....: SOUND METER
Input.....: Microphone
Field correction...: FREE
Device function....: LEVEL METER
Meas. start date...: 2007/08/03
Range.....: LOW
Logger trigger.....: Off
Start delay.....: 1 s
Calibr. factor.....: 6.6 dB
Calibration date...: 2007/08/03
Leq integration....: Linear

```

```
----- SETTINGS -----
```

```

Outdoor filter.....: Off
LEVEL METER version: 6.06
Meas. start hour...: 13:09:54
Measure trigger....: Off
Repeat cycle.....: 1
Integration time...: 1 m
Calibration by.....: Measurement
Calibration hour...: 12:39:58

```

```

Profile:   #1   #2   #3
Filter:    A   C   Z
Logger:    None None None

```

```

Profile:   #1   #2   #3
Detector:  FAST FAST FAST

```

```
----- RESULTS -----
```

```
Measurement time: 00:01:00
```

Prof.:	#1	#2	#3
PEAK	76.1 dB	75.9 dB	92.7 dB
MAX	60.0 dB	64.6 dB	89.7 dB
MIN	34.8 dB	44.7 dB	53.6 dB
SPL	47.5 dB	60.0 dB	72.7 dB
LEQ	44.3 dB	53.5 dB	76.0 dB
SEL	62.1 dB	71.3 dB	93.8 dB
Ld	44.3 dB	53.5 dB	76.0 dB
LEPd	44.3 dB	53.5 dB	76.0 dB
Ltm3	50.5 dB	57.9 dB	82.7 dB
Ltm5	52.2 dB	59.6 dB	82.7 dB
L01	52.6 dB	62.3 dB	87.0 dB
L10	45.8 dB	56.1 dB	79.7 dB
L20	44.5 dB	54.5 dB	76.1 dB
L30	43.7 dB	53.4 dB	74.0 dB
L40	43.1 dB	52.5 dB	71.7 dB
L50	42.5 dB	51.6 dB	69.2 dB
L60	42.0 dB	50.9 dB	66.5 dB
L70	41.4 dB	50.2 dB	63.5 dB
L80	40.8 dB	49.5 dB	60.6 dB
L90	39.8 dB	48.3 dB	58.2 dB

----- STATISTICS -----

----- STATISTICS -----

Measurement time: 00:01:00

Profile:	#1 [dB A]	#2 [dB C]	#3 [dB]
L01	52.6	62.3	87.0
L02	50.6	60.2	85.5
L03	49.4	59.1	84.0
L04	48.0	58.6	83.3
L05	47.3	58.3	82.7
L06	46.8	57.8	82.1
L07	46.5	57.0	81.5
L08	46.3	56.7	80.9
L09	46.0	56.4	80.3
L10	45.8	56.1	79.7
L11	45.7	55.9	79.3
L12	45.5	55.7	78.8
L13	45.4	55.5	78.5
L14	45.2	55.3	78.1
L15	45.1	55.1	77.8
L16	44.9	54.9	77.5
L17	44.8	54.8	77.2
L18	44.7	54.7	77.0
L19	44.6	54.6	76.5
L20	44.5	54.5	76.1
L21	44.4	54.4	75.8
L22	44.3	54.3	75.6
L23	44.2	54.2	75.4
L24	44.1	54.1	75.1
L25	44.0	54.0	74.9
L26	43.9	53.8	74.7
L27	43.9	53.7	74.5
L28	43.8	53.6	74.3
L29	43.8	53.5	74.1
L30	43.7	53.4	74.0
L31	43.6	53.3	73.7
L32	43.6	53.2	73.5
L33	43.5	53.1	73.3
L34	43.5	53.0	73.1
L35	43.4	52.9	72.9
L36	43.3	52.8	72.7
L37	43.3	52.7	72.4
L38	43.2	52.6	72.2
L39	43.2	52.6	72.0
L40	43.1	52.5	71.7
L41	43.0	52.4	71.4
L42	43.0	52.3	71.1
L43	42.9	52.2	70.8

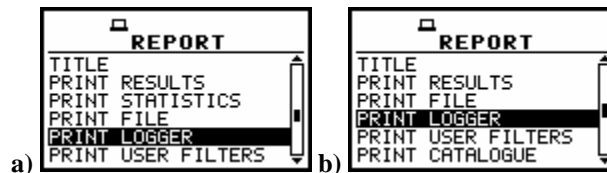
Profile:	#1 [dB A]	#2 [dB C]	#3 [dB]
L51	42.5	51.5	69.0
L52	42.4	51.5	68.7
L53	42.4	51.4	68.3
L54	42.3	51.3	67.9
L55	42.3	51.2	67.7
L56	42.2	51.1	67.5
L57	42.2	51.1	67.2
L58	42.1	51.0	67.0
L59	42.0	50.9	66.8
L60	42.0	50.9	66.5
L61	41.9	50.8	66.2
L62	41.9	50.7	65.9
L63	41.8	50.7	65.5
L64	41.8	50.6	65.2
L65	41.7	50.5	64.9
L66	41.6	50.5	64.6
L67	41.6	50.4	64.3
L68	41.5	50.4	64.1
L69	41.5	50.3	63.8
L70	41.4	50.2	63.5
L71	41.3	50.2	63.3
L72	41.3	50.1	63.0
L73	41.2	50.0	62.7
L74	41.2	50.0	62.4
L75	41.1	49.9	62.1
L76	41.1	49.8	61.8
L77	41.0	49.7	61.5
L78	40.9	49.7	61.2
L79	40.9	49.6	60.9
L80	40.8	49.5	60.6
L81	40.7	49.4	60.4
L82	40.6	49.3	60.1
L83	40.5	49.2	59.9
L84	40.4	49.1	59.7
L85	40.3	49.1	59.5
L86	40.3	49.0	59.3
L87	40.2	48.8	59.1
L88	40.1	48.7	58.8
L89	40.0	48.5	58.5
L90	39.8	48.3	58.2
L91	39.6	48.2	57.8
L92	39.4	48.0	57.5
L93	39.1	47.8	57.1

L44	42.9	52.1	70.5	L94	38.6	47.6	56.7
L45	42.8	52.0	70.2	L95	37.3	47.4	56.2
L46	42.8	51.9	69.9	L96	35.9	47.2	55.7
L47	42.7	51.9	69.7	L97	35.6	47.0	55.1
L48	42.6	51.8	69.6	L98	35.4	46.3	54.6
L49	42.6	51.7	69.4	L99	35.1	45.4	54.0
L50	42.5	51.6	69.2				

Example of the printed file from SOUND METER mode (LEVEL METER) - format A4

8.5 Printing of the logger results - PRINT LOGGER

The **PRINT LOGGER** enables the user to print out on a printer connected directly to the instrument the measurement results in a selected file from the logger or to send them to a PC using SvanPC software and USB interface. In order to enter the position the user has to select the **PRINT LOGGER** text in the **REPORT** list, using the <▲>, <▼> (or <◀>, <▶>) push buttons and press the <ENTER>. This option is under development - **Function not available** text appears on the display.



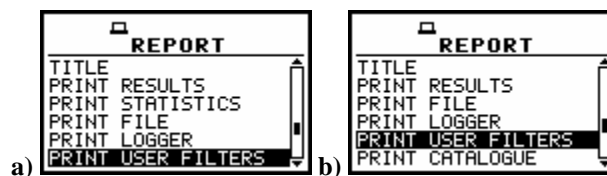
REPORT windows with PRINT LOGGER selected in SM (a) and VM (b)



PRINT LOGGER window opened - Function not available message

8.6 Printing of the coefficients of the user filters - PRINT USER FILTERS

The **PRINT USER FILTERS** enables the user to print out the values of the user filters introduced in the instrument: **S1, S2, S3**.



REPORT windows with PRINT USER FILTERS selected in SM and in VM

In order to enter the position the user has to select the **PRINT USER FILTERS** text in the **REPORT** list, using the <▲>, <▼> (or <◀>, <▶>) push buttons and press the <ENTER>. After pressing the <ENTER> push-button the instrument checks its current state. In the case when the measurements are performed, the printing is impossible and the message is displayed.



Display after the attempt to perform an unavailable operation during measurement in progress

The selection of the **USER FILTER** is made by means of the <<>, >>> push buttons.



PRINT USER FILTERS windows; the user filter selection

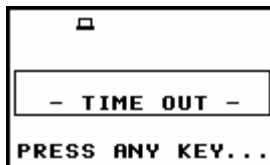
The contents of the selected file is sent out to the attached printer (or to a PC) after pressing the <ENTER> push-button. The following message is displayed on the display during the printing:



Display in REPORT list; the execution of PRINT USER FILTERS

When the message is on the display, the data are transferred from the instrument to the attached printer (or PC). The instrument returns to the **REPORT** list after transferring all data.

In the case when the printer or PC is not connected or there is any other reason that it does not receive the data the message about the time limit is displayed. The instrument waits for the reaction of the user (any push-button should be pressed except the <SHIFT> and <ALT>) and after pressing a push-button it returns to the **REPORT** list.



Display during the file transfer from the logger when there is no data transfer

The exemplary **USER FILTER** coefficients printed in A4 format look as follows:

(C) SVANTEK	957	No.12800	2007/08/06	(v6.06/6.06.2)	17:59:59
Sound meter mode filter					
----- S1 -----		----- S1 -----		----- S1 -----	
[Hz]	[dB]	[Hz]	[dB]	[Hz]	[dB]
0.80	-INF	25.00	40.0	800.00	10.0
1.00	-100.0	31.50	50.0	1000.00	0.0
1.25	-90.0	40.00	60.0	1250.00	-10.0
1.60	-80.0	50.00	70.0	1600.00	-20.0
2.00	-70.0	63.00	80.0	2000.00	-30.0
2.50	-60.0	80.00	90.0	2500.00	-40.0

3.15	-50.0	100.00	100.0	3150.00	-50.0
4.00	-40.0	125.00	90.0	4000.00	-60.0
5.00	-30.0	160.00	80.0	5000.00	-70.0
6.30	-20.0	200.00	70.0	6300.00	-80.0
8.00	-10.0	250.00	60.0	8000.00	-90.0
10.00	0.0	315.00	50.0	10000.00	-100.0
12.50	10.0	400.00	40.0	12500.00	-INF
16.00	20.0	500.00	30.0	16000.00	-INF
20.00	30.0	630.00	20.0	20000.00	-INF

Example of the printed coefficients of the user filter S1 - format A4

```
(C) SVANTEK      957
No.12800
2007/08/06      (v6.06/6.06.2)   18:05:35

Sound meter mode filter

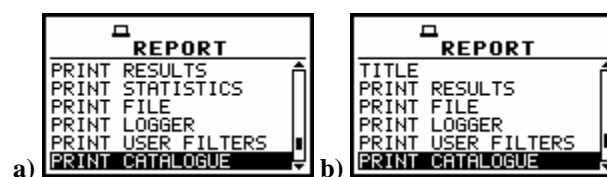
----- S2 -----      ----- S2 -----

      [Hz]      [dB]      [Hz]      [dB]
0.80      -INF      160.00      1.0
1.00      -INF      200.00      1.0
1.25      -INF      250.00      1.0
1.60      -INF      315.00      3.0
2.00      0.0      400.00      3.0
2.50      0.0      500.00      3.0
3.15      0.0      630.00      1.0
4.00      0.0      800.00      1.0
5.00      0.0      1000.00     1.0
6.30      0.0      1250.00     1.0
8.00      0.0      1600.00     1.0
10.00     0.0      2000.00     0.0
12.50     0.0      2500.00     0.0
16.00     0.0      3150.00     0.0
20.00     0.0      4000.00     0.0
25.00     0.0      5000.00     0.0
31.50     0.0      6300.00     0.0
40.00     0.0      8000.00     0.0
50.00     0.0      10000.00    -INF
63.00     0.0      12500.00    -INF
80.00     0.0      16000.00    -INF
100.00    1.0      20000.00    -INF
125.00    0.0
```

Example of the printed coefficients of the user filter S2 - format A5

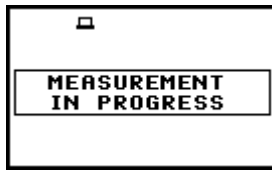
8.7 Printing of the file's catalogue - PRINT CATALOGUE

The **PRINT CATALOGUE** enables the user to print the catalogue of the files stored in the instrument on the attached printer. In order to enter the position the user has to select the **PRINT CATALOGUE** text in the **REPORT** list, using the <▲>, <▼> (or <<>, >>)) push buttons and press the <ENTER>.



REPORT windows with PRINT CATALOGUE selected in SM (a) and VM (b)

After pressing the <ENTER> push-button the instrument checks its current state. In the case when the measurements are performed, the printing is impossible and the message is displayed.



Display after the attempt to perform an unavailable operation during measurement in progress

After pressing the <ENTER> push-button the following message is displayed:

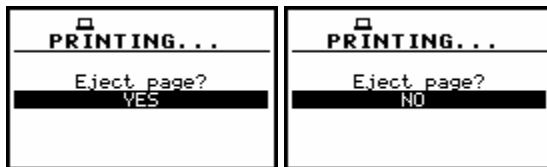


Display in REPORT list; the execution of PRINT CATALOGUE

When the message is on the display, the data are transferred from the instrument to the attached printer.

The instrument returns to the **REPORT** list after transferring all data but if the **Prompt** parameter was selected in the **EJECT P.** (*path: MENU / REPORT / OPTIONS / EJECT P.*), the confirmation question is displayed after the printing. The user has to answer in this case if the paper in the printer has to be ejected to the new page. The change of the available answers is possible after pressing the <<>, <>> push-buttons.

The return to the **REPORT** list is performed after pressing the <ENTER> push-button with the possible ejection of the paper to the new page.



Displays with the confirmation request of the paper ejection

The exemplary printed catalogue is presented below.

(C) SVANTEK	957	No.12800	2007/08/06	(v6.06/6.06.2)	18:04:18				
CATALOGUE CONTENTS			Number of files: 5						
Name	Mf	Length	Date	Time	Name	Mf	Length	Date	Time
03AUG0	<S1>	466	07/08/03	12:42	03AUG0CT	<Vt>	486	07/08/03	12:50
03AUGST	<S1>	1946	07/08/03	13:11	03AUGDOS	<Sd>	1946	07/08/03	14:05
06AUG0	<Vt>	486	07/08/06	17:53					

Example of the printed catalogue - format A4

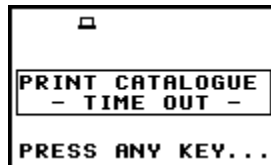
The same catalogue printed in A5 format looks as follows:

(C) SVANTEK	957	No.12800
2007/08/06	(v6.06/6.06.2)	18:05:38

CATALOGUE CONTENTS				
Number of files: 5				
Name	Mf	Length	Date	Time
03AUG0	<S1>	466	07/08/03	12:42
03AUG0CT	<Vt>	486	07/08/03	12:50
03AUGST	<S1>	1946	07/08/03	13:11
03AUGDOS	<Sd>	1946	07/08/03	14:05
06AUG0	<Vt>	486	07/08/06	17:53

Example of the printed catalogue - format A5

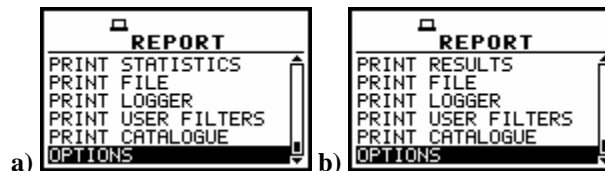
When the catalogue of the files is empty (the measurement results were not saved), the instrument returns to the **REPORT** list without any reaction.



Display during the catalogue printing when there is no data transfer

8.8 Selection of the printing options - OPTIONS

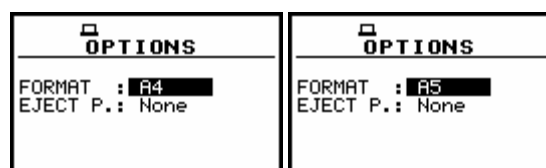
Using the **OPTIONS** the user can select the format of the listing (**FORMAT**), can control the way the paper is ejected in the printer (**EJECT P.**). In order to enter the position the user has to select the **OPTIONS** text in the **REPORT** list, using the <▲>, <▼> (or <◀>, <▶>) push-buttons and press the <ENTER>.



REPORT windows with OPTION selected in SM (a) and in VM (b)

8.9 Selection of the format of the print out - FORMAT

The **FORMAT** enables the user to select the format of the listing (**A4** and **A5** options are available). In order to confirm the selection the <ENTER> push-button has to be pressed. After this confirmation, the **OPTIONS** sub-list is closed. In order to ignore any changes made in the **OPTIONS** sub-list the user has to press the <ESC> push-button.

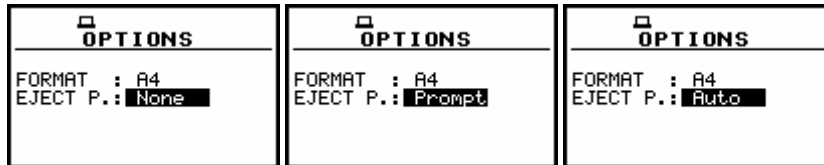


OPTIONS windows; the selection of the format

8.10 Controlling the paper ejection after print out - EJECT P.

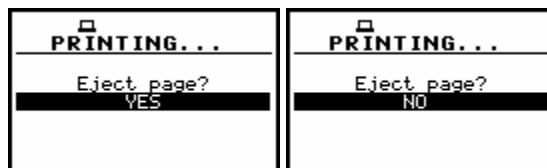
The **EJECT P.** enables the user to control the ejection of the paper after the listing is done. The following options are available: **Prompt** (the instrument asks whether to eject the page after printing report, statistics or catalogue), **Auto** (after printing, the paper is ejected) and **None** (the paper is not ejected after printing). In particular, it is possible to have one result after another using the **None** or **Prompt** options.

In the **EJECT P.** 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 **OPTIONS** sub-list is closed. In order to ignore any changes made in the **OPTIONS** sub-list the user has to press the <ESC> push-button.



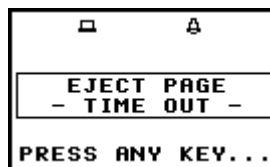
OPTIONS windows; the selection of the paper ejection

The request is displayed after the printing of the measurement results, the statistics of the results, the contents of the selected file, the contents of the selected file in the logger and the catalogue of the files (**PRINT RESULTS**, **PRINT STATISTICS**, **PRINT FILE**, **PRINT LOGGER**, **PRINT USER FILTERS**, **PRINT CATALOGUE**) if the **Prompt** parameter was selected in the **EJECT P.** position of the **OPTIONS** sub-list. The user has to answer in this case if the paper in the printer has to be ejected to the new page. The change of the available answers is possible after pressing the <<>, <>> push-buttons. The return to the **REPORT** list is performed after pressing the <ENTER> push-button with the possible ejection of the paper to the new page.



Displays with the request for the confirmation of the paper ejection

The message about the time limit is displayed in the case when the printer is not connected or there is any other reason that it does not eject a paper. The instrument waits for the reaction of the user (any push-button should be pressed except the <SHIFT> one) and after pressing a push-button it returns to the **REPORT** list.



Display after a printing when there is not possible to eject a paper