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SOUNTAINER®

Manual V1.0c



- 1 Audio Level Range
- 2 Name of MMC
- 3 Name of Track
- 4 Number of Track
- 5 Time Counter
- 6 Status (PLAY)
- 7 Battery Status
- 8 Audio Input (MIX)
- 9 Repeat (TRACK)
- 10 Active/Inactive MMC
- 11 Audio Mode (Stereo)
- 12 Bitrate
- 13 Samplingrate

Operational Elements

 <p>REC (starts recording) UP (jumps upwards)</p>	 <p>LEFT/RIGHT (jumps in the track list, MIC Gain adjustment)</p>
 <p>MENU (opens menu) OK (confirms changes)</p>	 <p>VOLUME (audio level adjustment)</p>
 <p>STOP (stops operations) DOWN (jumps downwards.)</p>	 <p>PLAY/PAUSE ESC (cancels changes, exit function)</p>

Technical Data

Graphical display:	100 x 64 dots
Memory sizes:	16 - 256 MB, two separate slots
Recording on:	MMC (MultimediaCard)
Current algorithm:	MPEG Layer III „mp3“
Audio engine:	100 MHz Motorola DSP
Recording capacity:	approx. 4 hours*
Playback:	approx. 8 hours*
	*when using 1.600 mAh NiMH rechargeable batteries
PC connection:	USB interface
Scope of delivery:	CD-ROM with driver software for Win98/2000 and mp3 samples
	1 x 32 MB MMC
	Stereo connection cable
	USB connection cable
	2 x 1.5V batteries (Mignon/AA)
Audio interfaces:	3.5 mm jack socket for:
	Line input, stereo
	Microphone input, stereo
	Line/Earphones output, stereo
Dimensions (BxLxH):	62 x 110 x 24 mm
Weight (incl. batteries):	approx. 140 g

For your information

This manual is for the use of the owners and their staff only. The information in the manual, including all texts and drawings, are to be treated as confidential, and are not to be reproduced, translated or published. The original documentation, its contents or parts of it are not to be passed on to third parties or copied in any form. Hereby the right to registered utility models or patent application is reserved explicitly. In the case of violation or non-compliance resulting in consequent losses, DIALOG4 may be entitled to claim damages according to the German BGB, HGB as well as the competition law and Patents Act.

Due to the further development and product improvement of the present unit and alterations of certain industrial parts, it cannot be avoided that some parts may not be fully compatible.

All technical alternations may be subject to change without notice.

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The MPEG Technology

The ISO/MPEG technology (Layer II and III) developed by the "Institut für Rundfunktechnik" and the Fraunhofer Institute allows music signals (also in larger quantities) to be recorded by means of data reduction without any considerable loss of quality.

The principle of audio data reduction is based on the frequency dependent sensitivity of the human ear. The objective auditory properties and subjective habits of the ear means that the ear ignores certain sounds and concentrates on the most essential: The message. This contrasts with purely electronic techniques which hear everything, even the non-essential.

The MPEG audio technology utilises the difference between ear and electronic measuring equipment when reducing data. By masking all superfluous noise, a reduction ratio is achieved which is necessary in order to store large amounts of real time data in recording components. The data is compressed and subjected to A/B comparison and then the ear hears only what is should.

No more and no less.

Some examples of data compression rates achieved with ISO/MPEG1:

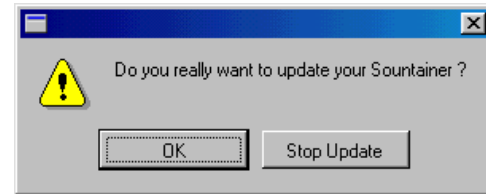
- 1:4** at Layer I with 384 kbps, stereo
- 1:6...1:8** at Layer II with 192...256 kbps, stereo
- 1:10...1:12** at Layer III with 112...128 kbps, stereo.

Update

This feature ensures that your MP3 player always offers you the latest in technology. Almost all functional components are stored in the Flash EPROMS. Further software updates, manuals and technical information can be called up at all times over the Internet at:

<http://www.dialog4.com>

Before starting an upload / download ensure that your SOUNTAINER® is in the STOP mode. Confirm the safety query with OK and follow the instructions on your PC screen.

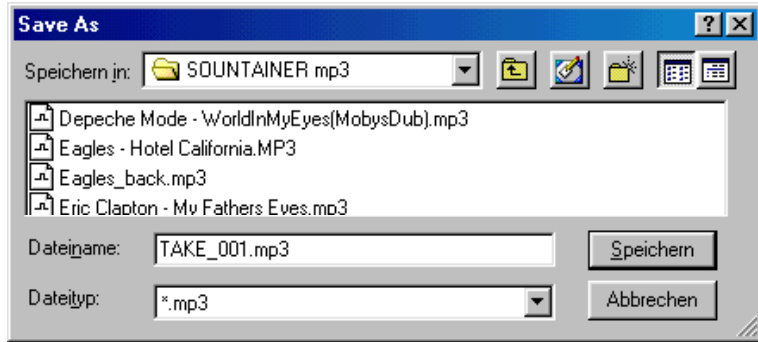


Interruption of the connection or switching off the computer will result in an unsuccessful update and the update procedure will then have to be repeated. It may happen you are not able to switch the SOUNTAINER® off after an update. In such case, please remove the batteries.

Get from SOUNTAINER

This feature enables the MP3 recordings to be copied onto your PC and then processed or renamed using the existing program.

The ID3 tag, containing detailed information on the title name, artist, recording date, comments and more, can also be edited with certain of these programs.



Send to SOUNTAINER

The MP3 data files are transferred to the SOUNTAINER® using this feature. A short message (see illustration right) will inform you when the recording capacity of the activated MMC has been exceeded. The SOUNTAINER® will also display the message **"MMC full!"**.



Getting Started

Place two 1,5 V batteries or rechargeables (Mignon/AA) into the battery compartment.



Insert the MultimediaCards.
Use only MMCs from SanDisk.



Connection possibilities for
microphone, hi-fi system
and earphones.



Menu Structure

After switching on the unit, the SOUNTAINER® is found in the STANDBY/STOP mode (see icon # 6).



Navigation

All menus are called up using the menu button. Menu items followed by three dots (...) contain sub-menus.

Use the UP/DOWN buttons to select a menu item. The active line is displayed inverted (negative).

Confirm your selection with the OK button. Press the ESC/Exit button to abort.

Functions

You will recognise that the operating screen of the program is clearly laid out and constructed similarly to that of the SOUNTAINER®

The following features are found in the software version:

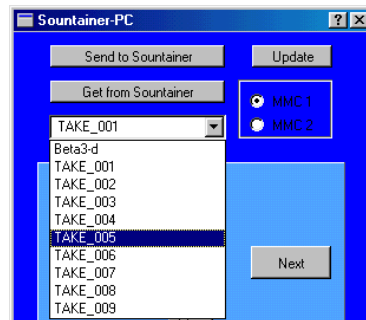
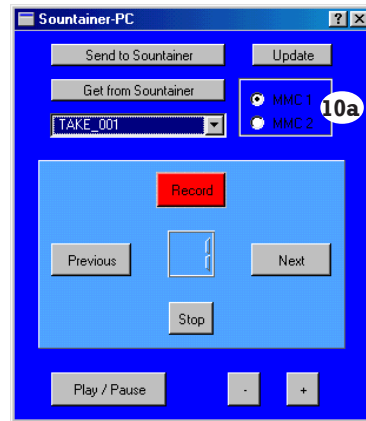
MMC1/MMC2

The inserted MultimediaCards are activated / deactivated by marking the radio buttons (icon # 10a). As previously mentioned (please see page 5), only one MMC can be activated at any given time.

Play-List

Here a pop-up window, opened with a click, displays the entire content of the active MMC.

This enables you to easily trace a certain track which can immediately be played back.



SOUNTAINER® PC Software

The SOUNTAINER® will soon become the link between your hi-fi system and Internet.

First install the control software and the USB driver onto your PC. The connection between PC and SOUNTAINER® is possible using the special USB cable included in the scope of delivery.



Switch off the SOUNTAINER® and use only fully charged batteries, ensure that the USB cable has been properly and securely inserted. Place the reference CD-ROM into the CD-ROM drive of your PC. After switching on the SOUNTAINER® again, the Microsoft Windows system will recognise the new "Plug'n Play" hardware and will search for the suitable driver. This data is also included on the reference CD-ROM. Enter the position of the CD-ROM driver. Do not remove the power supply plug once the connection has been established and once the data transmission has been initiated.

After the software has been successfully installed, open the SOUNTAINER (.exe) program with a double click (reference CD-ROM).

The following menu items are contained in the **STANDBY/STOP** mode:

MMC...

with options to:

Activate MMC

Here the MMCs found in slot 1 / slot 2 are activated/deactivated. Confirm the changes you have made with the OK button. Only one MMC can be activated and this is shown inverted on the display (see icon # 10).

CardInfo MMC

An overview of the name and recording capacity of the activated MMC, the number of titles saved as well the remaining recording space is displayed here. To exit this menu press the ESC/Exit button.

Format MMC

You here have the possibility to format the activated MMC. Press the OK button after the safety query to confirm that you want to delete all recordings from the MMC.

Please note: The entire content of the MMC is deleted with this function.

This operation is not reverseable!

The MMCs may only be formatted inside the SOUNTAINER®.

Tone Control...

Here the volume, bass and trebles are altered to your personal taste. The level control display (see icon # 1) is represented on a dB scale. The values are changed using the VOLUME button. The volume is altered accordingly.

Volume 50% (ex-factory)

Setting the volume output.

When operating the volume button in the playback or recording mode, the set value is displayed for two (2) seconds. The level meter is only visible during recording or playback and displays the levels of the left and right channels.

Bass 00 dB (ex-factory)

Adjusting the bass values.

Treble 00 dB (ex-factory)

Adjusting the treble values.

All of these values can be changed during recording or playback without having to interrupt operation.

To exit this menu item please press the OK button.

Settings

Settings made with the different menu functions are automatically taken over after being marked with the cursor and upon exiting the menu item (ESC/Exit button). The following settings exist even after the unit has been switched off:

Activated MMC,
MP3 Configuration,
Recording Source (Input Select),
Volume / Bass / Trebles,
Display Backlight,
Time Setting (Time),
Microphone Input Power,
Microphone Level Control (MIC Level)
and Amplification (MIC (Auto) Gain).

Return to the original settings ex-factory using the menu item SYSTEM / Set Defaults.

Active:	MMC 1	Input Select:	Line
MP3-Config:	CD Quality	MIC Power:	OFF
Volume:	50%	Auto Gain:	OFF
Bass:	0 dB	MIC Gain:	27 dB
Trebles:	0 dB	Backlight:	AUTO
Repeat:	OFF		

Important Information

Before undertaking an up/download set the unit to the STOP mode. Should the SOUNTAINER® not be automatically switched off after a software update, remove the batteries and insert once again.

During data transfer, the display on the PC monitor is not updated continuously. This only takes place after the download has been successfully completed.

We recommend using only rechargeable batteries as these have a larger capacity than alkali batteries. The playback time is largely dependent on the type of battery:

REC with modern alkali batteries	approx. 1 hour
PLAY with modern alkali batteries	approx. 8 hours
REC with NiMH 1600 mAh rechargeables	approx. 3 – 4 hours
PLAY with NiMH 1600 mAh rechargeables	approx. 6 – 8 hours

Use only MMCs from SanDisk! The length of recording/play time is dependent on the bitrate:

64 MB REC Capacity	=	65 min. CD Quality
		88 min. FM Quality
		130 min. Long Play
		260 min. Voice Recording

The maximum number of recordings per MMC is 255 tracks.

System... with the following options:

Info

Here the current software version and the battery power supply is interrogated. Leave this menu item with the ESC/Exit button.

Set Defaults

After confirming the safety query with the OK button, all of the settings which you have made are replaced by the original values ex-factory.

SW Update (MMC)

Here the software update from a MMC is started.

Please note: Do not switch the unit off during the update procedure!

An unsuccessful update is displayed with the message "BOOT ERROR". A renewed update is only possible using the PC software (please see page 21).

Backlight AUTO (setting ex-factory)

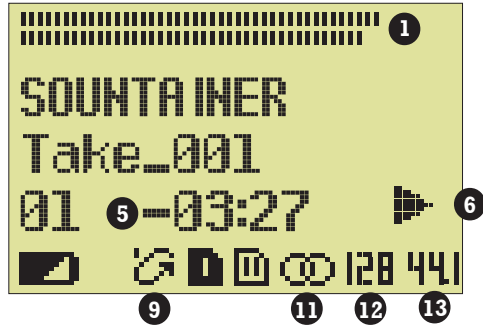
Here you have the possibility to set the display backlight to either ON, OFF or AUTO, using the volume buttons. When set to AUTO, the backlight is switched on for 20 seconds after any button has been pressed. Confirm your selection with the OK button.

Del: <Track Name>

Selecte a track to be deleted and confirm with the OK button.

Playback Mode

To begin the playback of a track (see icon # 6) press the PLAY button. The name, position number, play duration and the audio parameters (icons # 11, 12, 13) of the selected title are automatically displayed.



In this operating mode the volume is changed using the VOLUME button. The level is shown in the upper area of the display.

The playback of a track is interrupted with the PAUSE button. Press the PAUSE button once again to continue with the playback or end this function by using the STOP button.

Start Recording by pressing the REC button.

Begin the recording of a new track by pressing this button once again. The new track recording will begin immediately, without interruption.

During the recording, changes to both the output volume (VOLUME button) and the microphone amplification (LEFT/RIGHT buttons) are possible.



Interrupt the recording temporarily by briefly pressing the PLAY/PAUSE button. Pressing the STOP button will end the recording.

A standard name and a position number (03) is automatically allocated to the new track (for e.g. TAKE-00X). The renaming and sorting of tracks can then take place via PC.

Mic Setup...

with the menu items:

Mic Power OFF (ex-factory)

Phantom power (3,3V) for electret condensor microphones. The setting is changed by using the VOLUME button.

AutoGain OFF (ex-factory)

This setting is for the automatic regulation of the microphone amplification. Alterations to the setting are made using the VOLUME button.

MicGain 27 dB (ex-factory)

This is for the manual regulation of the microphone amplification. Changes to the setting are also made using the VOLUME button.

Please note:

Should AutoGain be activated then the settings under MicGain are ignored.

Confirm the settings with the ESC/Exit button. You then automatically exit this menu item.

Use the LEFT/RIGHT buttons to select another track. The playback of the following title is automatically started without interruption.

Menus in the Playback Mode

You have the possibility to also select the following features as menu items in the PLAY/PAUSE mode:

Time

Here you will find information on the played or remaining (see icon # 6) time of each title.

Tone Control...

The volume, bass and trebles are set by using the VOLUME button, in the same way as in the STANDBY/STOP mode (pls. see page 8).

Repeat...

When the repeat function has been activated a new icon (see # 9) is found on the display. Exit this menu item using the ESC/Exit button.

REPEAT TRACK The title you have selected for playback is continuously repeated.



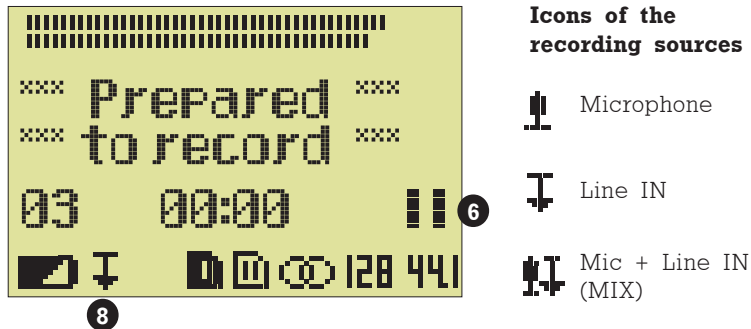
REPEAT ALL All titles are repeated continuously.



REPEAT OFF All titles are played only once.

Recording Mode

To prepare the unit for recording, press the RECORD button. The unit will switch to pause mode (icon # 6). The LED flashes continuously.



Menus in the Recording Mode

In the REC/Recording Pause mode (icon # 6) the following options are selectable:

Time

Here you can select between the current time display of the recording or the remaining recording space (time) on the MMC. The recording capacity of the MMC is dependent on the set MP3 configuration and the MB size of the card.

MP3 Config...

This menu item is only selectable in the REC/Pause mode and serves to set the audio quality. The selectable options are:

CD Quality	128 kbps, 44.1 kHz, stereo, (sounds the best)
FM Quality	96 kbps, 32 kHz, stereo, (saves recording space and sounds good)
Long Play	64 kbps, 22.05 kHz, stereo, (good voice quality)
Voice Recorder	32 kbps, 16 kHz, mono. (as dictating unit)

Leave this menu with the OK button.

Input Select...

Here you can select the audio inputs from microphone, line input or Mic+Line (MIX). Depending on the recording source you have selected, the respective icon (8) is present on the display (please see page 12).

The MIC amplification is set using the VOLUME button. The level setting of the stereo channels during MIC recordings can be set to take place either automatically or manually. An automatic setting means that the amplification is monitored and adapted during the entire duration of the recording. This guarantees a good recording even under difficult conditions.

The start of a peak overload is shown with a red colouring of the LED.