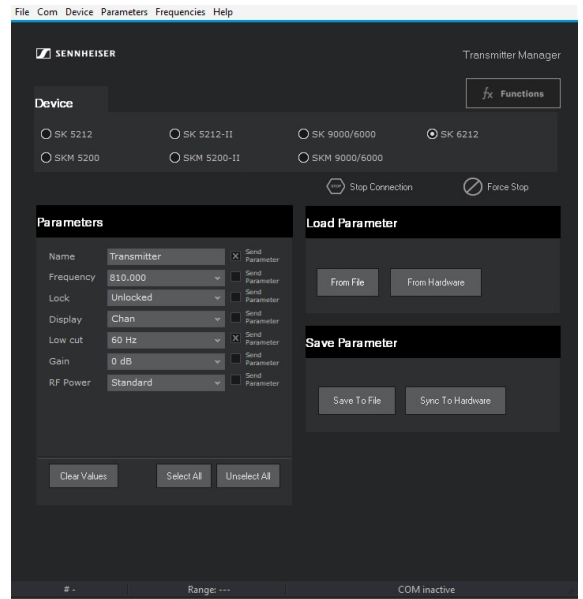




Sennheiser Transmitter Manager (STM)

SSW 211025 R05



Software Manual

As of software version 4.1.1



Contents

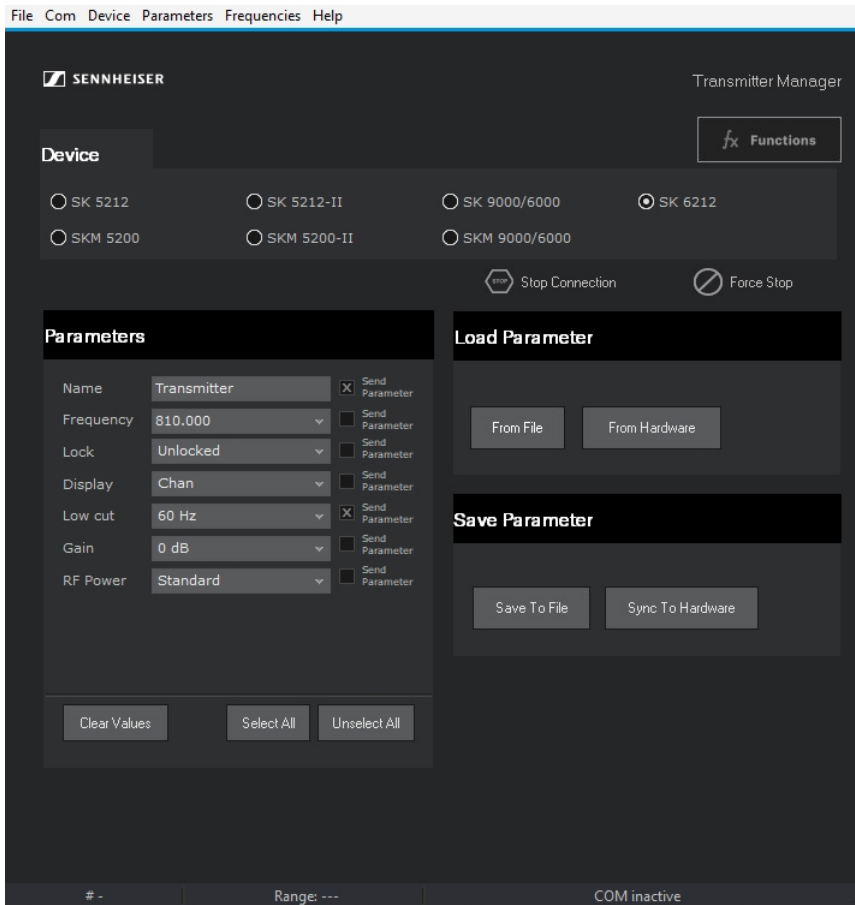
1 About this software	1
2 Start the service software	2
2.1 Requirements	2
2.2 Prepare your PC	2
3 Menu operations	3
3.1 "File" menu	3
3.2 "Com" menu	3
3.3 "Device" menu	4
3.4 "Parameters" menu	4
3.5 "Frequencies" menu	5
3.6 "Help" menu	5
4 Read out transmitter parameters	6
5 Change transmitter parameters	8
6 Create a new parameter profile	11
7 Edit parameter profiles	12
8 Edit transmitter frequencies	13
9 Write parameters into the transmitter	16
9.1 Write into one transmitter	16
9.2 Write into several transmitters	16
10 Appendix	17
10.1 Supported transmitters	17
10.2 Document information	17
10.3 License agreement	18
10.4 Legal notice	20
10.5 Service & Support	21



1 About this software

With the "Sennheiser Transmitter Manager (STM)" you can read out and change parameters of all [Supported transmitters \(on page 17\)](#).

Furthermore you can create your own transmitter parameter profiles for different use cases. Depending on your use case you can write one parameter profile into several transmitters.





2 Start the service software

2.1 Requirements

2.1.1 Commercial service tools and software

Name	Supplier	Specifications
Infrared adapter (USB)	Commercial	We recommend using the following IR adapter: ACT-IR224UN-L+ EMEA: https://www.jacobi.de/IrDA-Adapters/Industrial-Adapters/ACT-IR224UN-L-USB-Infrared-Adapter-IrDA-function-like-IR220L::58.html?language=en Americas: http://www.actisys.com/IrDAProd.html#IR224UN
PC	Commercial	Operating system: Windows® version 10 or higher with free USB port.
Sennheiser Transmitter Manager (STM)	Sennheiser	As of software version 4.1.1. Recommendation: Run the software in 100% windows display scale.



This software has been designed with Windows® 10.

2.2 Prepare your PC

1. Log in as Windows® administrator.
2. Install the Sennheiser Transmitter Manager (STM) on your PC.



3 Menu operations

3.1 "File" menu



Shortcut [ALT] + [F].

Menu bar	Button	Description
From File	From File	Load a parameter profile from your harddisk.
Save To File	Save To File	Save a new or modified parameter profile to your hard disk.
From Hardware	From Hardware	Read out the parameters from your connected transmitter.
Sync To Hardware	Sync To Hardware	Overwrite the parameters of your connected transmitter.
Quit		Close this software.

3.2 "Com" menu



Shortcut [ALT] + [C].

You will connect a USB infrared adapter, but you will establish a serial connection which will be displayed in the Windows device manager. Read [Read out transmitter parameters \(on page 6\)](#)

Menu bar	Description
Close port	Close the currently used serial COM port.
COM x	Select the serial COM port to which your USB infrared adapter is connected. Details are shown in the Windows device manager



3.3 "Device" menu



Shortcut [ALT] + [D].

Menu bar	Description
Device	Select your connected transmitter type in the menu or in the "Device" section.

3.4 "Parameters" menu



Shortcut [ALT] + [P].


Menu bar	Button	Description
Clear Values	Clear Values	All inserted or selected parameters will be cleared.
Select All	Select All	All parameters will be selected.
Unselect All	Unselect All	All parameters will be unselected.



3.5 "Frequencies" menu



Shortcut [ALT] + [R].

Menu bar	Button	Description
Frequency Editor		Opens the "Frequency Editor" window.
Load	-	Load a frequency set file from the hard disk into the frequency editor. You already see the frequency in the 'Parameters' section.
Save	-	Save the currently shown frequency set file to the hard disc.
-	Load From File	Load a frequency set file from the hard disk into the frequency editor. After editing click on Use to confirm.
-	Import WSM	Load a WSM report file from the hard disk into the frequency editor. After editing click on Use to confirm.
-	Use	Shows the entries of the frequency editor as a preview in the "Frequency" pull down menu in the "Parameters" section.
-	Clear Values	Delete all entries of the "Frequency Editor" window.

3.6 "Help" menu



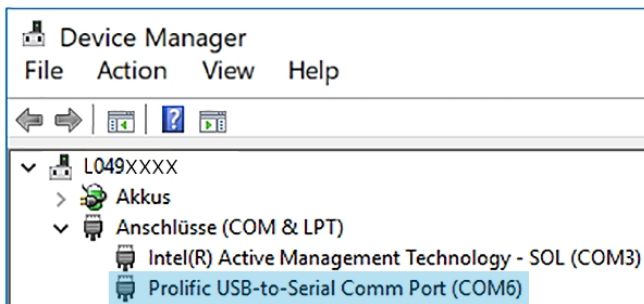
Shortcut [ALT] + [H].

Menu bar	Description
About	Software version.
Content	Opens this help.



4 Read out transmitter parameters

1. Connect a commercial infrared adapter to a USB port. In the [Requirements \(on page 2\)](#) you will find a recommended adapter.
2. Press [Windows] + [x] to open the Windows® control panel.
3. Click on "Device Manager".
4. Note the COM port number of your connected infrared adapter. In the example below the "Prolific" infrared adapter has been connected at "COM6".

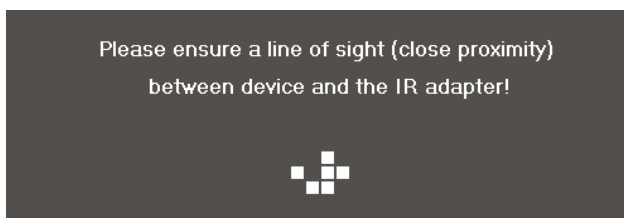


5. Start the Sennheiser Transmitter Manager (STM).
6. Select your transmitter type from the "Device" section.
7. In the "Com" menu select your infrared adapter port, in our example "COM6".
8. Switch on the transmitter.
9. Keep the infrared adapter directly in view to the display of one transmitter.



Do not put several running transmitters in view of one infrared adapter. They may disturb the infrared communication of each other.

10. Click on the **From Hardware** button.
The "Data transfer in process" section flashes white/red. The connection to the transmitter will be established. With the stop button you can interrupt this procedure (only 5000 series).



Result:

- "Parameters" section: All transmitter parameters will be displayed. In the



lower left corner your transmitter will be displayed, e.g. an SK 6212.

- In the status bar the frequency range and the connected PC COM port will be displayed.
- The indicator of the button lights up green.

If the transmitter parameters have not been successfully read out, the indicator of the button lights up red. A reason could be an outdated firmware. Furthermore setting up the PC COM port will take some time, so waiting some seconds after re-selecting the device and re-opening the right port will help as well.





5 Change transmitter parameters



You have [Read out transmitter parameters \(on page 6\)](#)

1. Change the parameter values in the "Parameters" section. The appropriated check boxes will be automatically activated.



Only activated parameters will be transmitted.

When the activated parameters have been successfully written to the transmitter, in the lower left corner of the "Parameters" section the device entry will be changed. The example below shows an SK 6212.

- "SK 6212 device": No changed parameter(s).
- "SK 6212 device changed: Changed parameter(s).



Each transmitter series has different parameter limitations (e.g. allowed number of display characters). In addition to the following table we recommend to read the specifications in the respective instruction manuals on [sennheiser.com](https://www.sennheiser.com).



Name	Description
Name	Enter a transmitter name which can consist of up to 6 characters. Allowed are A-Z, 0-9 and a few special characters..
Frequency	Enter the transmitting frequency directly or select it from the pull down list. You can Edit transmitter frequencies (on page 13)
Lock	Activate or deactivate the autolock function.
View or Display	Select the transmitters display visualization: <ul style="list-style-type: none">• "Chan" or "Preset": Transmitting channel will be displayed (not available for SK 6212). The SK/SKM 6000/9000 menu name is "Display" with display visualization "Preset".• "Freq": Transmitting frequency will be displayed.• "Name": Transmitter name will be displayed.
LowCut	To reduce unwanted low-frequency noises, select a low-cut filter: <ul style="list-style-type: none">• SK 5212/-II: "Flat" or "120 Hz"• SKM 5200/-II: "Flat", "120 Hz" or "190 Hz"• SK 6000 / SK 9000: "30 Hz" or "60 Hz", "80 Hz", "100 Hz" or "120 Hz"• SKM 6000: "60 Hz", "80 Hz", "100 Hz" or "120 Hz".• SKM 9000: "60 Hz", "80 Hz", "100 Hz" or "120 Hz".• SK 6212: "30 Hz", "60 Hz", "80 Hz", "100 Hz" or "120 Hz"
Attenuation	Select the transmitters sensitivity: <ul style="list-style-type: none">• SK 5212/-II: -30 dB to 40 dB• SKM 5200/-II: -40 dB to 0 dB• SK 6000/9000: -6 dB to 42 dB *• SKM 6000/9000: 0 dB to 42 dB *• SK 6212: -6 dB to +42 d
RF output power	The transmitter features switchable output power. With reduced output power, the operating time increases. In addition, you can adjust the transmitter to "Low Intermodulation mode" ("LoI"). By so doing, the transmitters intermodulation performance is significantly improved, especially in multi-channel operation: <ul style="list-style-type: none">• SK 5212: "LOW" (10 mW) or "HI" (50 mW)• SK 5212-II: "LOW" (10 mW), "LoI" (10 mW) or "HI" (50 mW)• SKM 5200: 50 mW



Name	Description
	<ul style="list-style-type: none">• SKM 5200-II: "LOW" (10 mW), "LoI" (10 mW) or "HI" (50 mW)• SK 6000: "LR" (25 mW) or "LD" (3.5 mW)• SK 6212: "LR": Standard (15 mW) or "LOW" (3.5 mW) and "LD": 3.5 mW• SKM 6000: "LR" (25 mW) or "LD" (1 mW)• SK 9000: "LR" (25 mW) or "HD" (10 mW)• SKM 9000: "LR" (25 mW) or "HD" (10 mW)
	<p>SK/SKM 6000: If you use a new transmitter, you can toggle between "LR" and "LD" mode. If you use an old transmitter, you can only toggle from "LD" to "LR" mode. If you want to toggle this old transmitter from "LR" to "LD" mode, use the EM 6000 sync function.</p>



6 Create a new parameter profile

1. Change the transmitter parameters.
2. To save the parameter profile, click on the **Save To File** button.



7 Edit parameter profiles

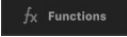
1. To load an existing parameter profile file, click on the **From File** button.
2. Change the transmitter parameters.
3. To save the parameter profile, click on the **Save To File** button.

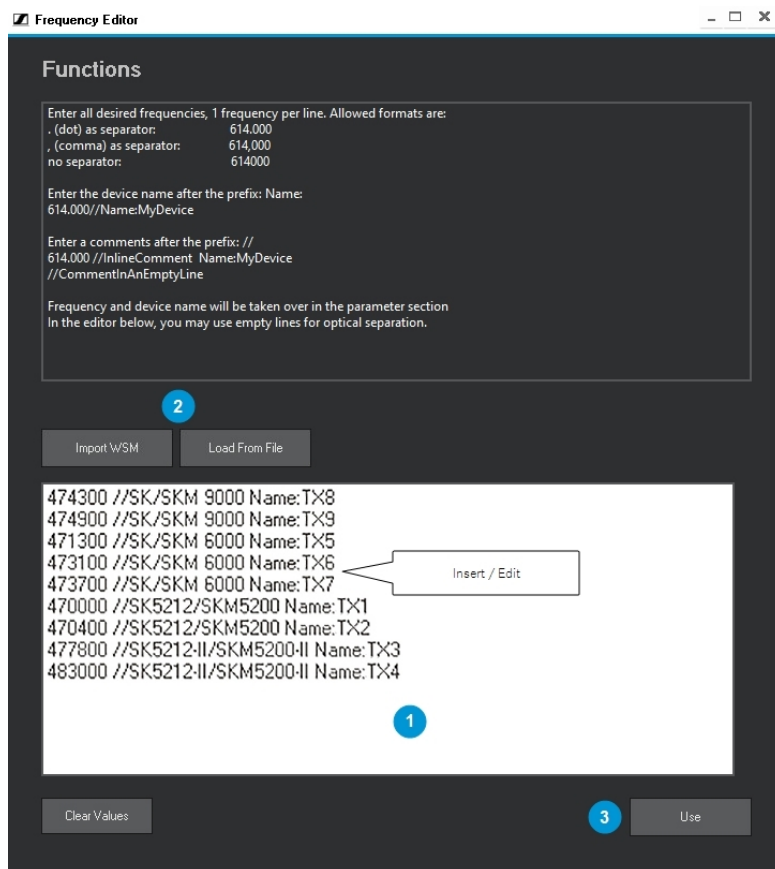


8 Edit transmitter frequencies



Requirement: You have [Read out transmitter parameters \(on page 6\)](#)

1. Click on the  button. The "Frequency Editor" window opens and shows the frequency entries of your connected transmitter.
2. Insert or change entries as described below.





Section	Description / action
1	<p data-bbox="293 331 721 387">Insert or edit frequency entries. To delete all entries, click on Clear Values.</p> <ul data-bbox="293 439 981 651" style="list-style-type: none"><li data-bbox="293 439 938 495">• To make the frequencies more readable, you can use a dot for separation, a comma or no separator.<li data-bbox="293 510 874 539">• You can add comments after a double slash "/" prefix.<li data-bbox="293 555 981 611">• Empty lines for separation are allowed in the editor but will not be shown in the frequency list.<li data-bbox="293 627 836 651">• Enter the transmitter name after the prefix "Name:"
2	<ul data-bbox="293 712 981 779" style="list-style-type: none"><li data-bbox="293 712 895 741">• Import WSM report (xml or html file) from your hard disk.<li data-bbox="293 757 981 786">• Load From File a frequency set (csv or txt file) from your hard disk. <p data-bbox="325 792 963 815">Note: Supported transmitters (on page 17) will be supported only.</p>
3	<p data-bbox="293 875 1034 965">After your changes, click on Use to show the entries of the frequency editor as a preview in the "Frequency" pull down menu in the "Parameters" section.</p> <p data-bbox="293 1003 963 1093">This is useful to edit your entries. When closing this window, the frequencies will be shown in the "Frequency" pull down menu in the "Parameters" section.</p> <ul data-bbox="293 1144 1013 1391" style="list-style-type: none"><li data-bbox="293 1144 981 1200">• The entries of the pull down menu have not yet been written in the transmitter.<li data-bbox="293 1216 1013 1245">• The inserted frequency overwrites the first frequency of user bank U1.<li data-bbox="293 1261 981 1391">• Make sure that your inserted frequencies are supported by the transmitter. Otherwise your frequency entry in the parameters "Frequency" pull down menu of the STM will be shown with red background color, see figure below.



File Com Device Parameters Frequencies Help

SENNHEISER Transmitter Manager

Device fx Functions

SK 5212 SK 5212-II SK 9000/6000 SK 6212
 SKM 5200 SKM 5200-II SKM 9000/6000

Stop Connection Force Stop

Parameters

Name: Transmitter Send Parameter

Frequency: 100 // SK/SKM 9000 Name Send Parameter
474.300 // SK/SKM 9000 Send Parameter

Lock: 474300 // SK/SKM 9000 Send Parameter
474900 // SK/SKM 9000 Send Parameter
471300 // SK/SKM 6000 Send Parameter
473100 // SK/SKM 6000 Send Parameter
473700 // SK/SKM 6000 Send Parameter
470000 // SK5212/SKM5200 Send Parameter
470400 // SK5212/SKM5200 Send Parameter
477800 // SK5212-II/SKM5200-II Send Parameter
483000 // SK5212-II/SKM5200-II Send Parameter

Display: 474300 // SK/SKM 9000 Send Parameter

Low cut: 470000 // SK5212/SKM5200 Send Parameter

Gain: u dB Send Parameter

RF Power: Standard Send Parameter

Clear Values Select All Unselect All

Load Parameter

From File From Hardware

Save Parameter

Save To File Sync To Hardware

Frequency Editor

Functions

Enter all desired frequencies, 1 frequency per line. Allowed formats are:
- (dot) as separator: 614.000
- (comma) as separator: 614,000
no separator: 614000

Enter the device name after the prefix: Name
614.000//Name:MyDevice

Enter a comments after the prefix: //
614.000 //InlineComment Name:MyDevice
//CommentInAnEmptyLine

Frequency and device name will be taken over in the parameter section in the editor below, you may use empty lines for optical separation.

Import WSM Load From File

```
474300 //SK/SKM 9000 Name:TX8
474900 //SK/SKM 9000 Name:TX9
471300 //SK/SKM 6000 Name:TX5
473100 //SK/SKM 6000 Name:TX6
473700 //SK/SKM 6000 Name:TX7
470000 //SK5212/SKM5200 Name:TX1
470400 //SK5212/SKM5200 Name:TX2
477800 //SK5212-II/SKM5200-II Name:TX3
483000 //SK5212-II/SKM5200-II Name:TX4
```



9 Write parameters into the transmitter



Finally check your changed transmitter parameters.

9.1 Write into one transmitter

1. Click on the **Sync To Hardware** button.

The "Data transfer in process" status line flashes white/red. The connection to the transmitter will be re-established. The activated parameters of the "Send parameter" check boxes will be transmitted.

Result:

The "Parameters" section shows the changed parameters. In the lower left corner of the "Parameters" section the device entry will be changed.



If the transmitter parameters have not been successfully written, the indicator of this button lights up red. A reason could be an outdated firmware.

9.2 Write into several transmitters

You can write **one** saved or **one** recently loaded profile to several transmitter.

You can write one parameter profile into different transmitter series. Please observe, that different transmitter series may have different specification limits. If necessary, your entry will be automatically limited (e.g. the end of a transmitter name will be cut).

1. Keep the first "follower" transmitter with the display directly in view of the infrared adapter.
2. Click on the **Sync To Hardware** button.
3. Continue with further "follower" transmitters.



10 Appendix

10.1 Supported transmitters

5000 series

- SK 5212
- SK 5212-II
- SKM 5200
- SKM 5200-II

6000 series

- SK 6000
- SKM 6000
- SK 6212

9000 series

- SK 9000
- SKM 9000

10.2 Document information

Date	Revision	As of software version Chapter / Comment
MAY 2009	Basic Issue	First published version. Sennheiser electronic GmbH & Co. KG Am Labor 1, 30900 Wedemark, Germany
NOV 2013	R01	Software version 3.3.x: License key version.
JUL 2020	R02	Software version 4.0.0: - Added: SK 6000, SKM 6000 and SK 6212 - No license key required. - New frequency editor features.
DEC 2020	R03	Software version 4.0.0: - Added: New infrared adapter for Americas.
JAN 2021	R04	Software version 4.0.1: - Changed: URLs for infrared adapters in "Equipment"
OCT 2021	R05	Software version 4.1.1: - Redesigned user interface. - Frequency Editor: Import WSM reports as HTML files. - Minor changes of the user manual.



10.3 License agreement

Read the terms of this license agreement and any provided supplemental license terms (collectively "agreement") carefully. The software this license applies to is protected by copyright law and other international legislation, regulations and agreements about intellectual property. By installing, using or copying the software, you agree to be bound by the terms of this agreement.

10.3.1 License to use

Sennheiser electronic GmbH grants you a non-exclusive and non-transferable license for the use of the accompanying software and documentation (collectively "Software") only to remote control Sennheiser Audio Equipment. You may not use the Software with any hardware other than Sennheiser equipment without a separate written license agreement.

10.3.2 Restrictions

The Software is protected by intellectual property rights. Title to Software and all associated intellectual property rights including without limitation any modifications, enhancements and revisions of the Software, is retained by Sennheiser and/or its licensors. Unless enforcement is prohibited by applicable law, you may not modify, decompile, or reverse engineer Software. No right, title or interest in or to any trademark, service mark, logo or trade name of Sennheiser or its licensors is granted under this agreement.

10.3.3 Disclaimer of warranty

The Software is provided "AS IS". Without limiting the foregoing, Sennheiser does not guarantee that the Software is free of errors or will operate without bugs, viruses, loss of data or interruptions. Your exclusive remedy and Sennheiser's entire liability under this limited warranty will be replacement of the Software by Sennheiser. All express or implied conditions, representations and warranties, including any implied warranty of merchantability, fitness for a particular purpose or non-infringement are disclaimed by Sennheiser, except to the extent that these disclaimers are held to be legally invalid.

10.3.4 Limitation of liability

TO THE EXTENT NOT PROHIBITED BY LAW, IN NO EVENT WILL SENNHEISER OR ITS LICENSORS BE LIABLE FOR ANY LOST REVENUE,



PROFIT OR DATA, OR FOR SPECIAL, INDIRECT, CONSEQUENTIAL, INCIDENTAL OR PUNITIVE DAMAGES, HOWEVER CAUSED REGARDLESS OF THE THEORY OF LIABILITY, ARISING OUT OF OR RELATED TO THE USE OF OR INABILITY TO USE SOFTWARE, EVEN IF SENNHEISER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT WILL SENNHEISER'S LIABILITY TO YOU, WHETHER IN CONTRACT, TORT (INCLUDING NEGLIGENCE), OR OTHERWISE, EXCEED THE AMOUNT PAID BY YOU FOR SOFTWARE UNDER THIS AGREEMENT. THE FOREGOING LIMITATIONS WILL APPLY EVEN IF THE ABOVE STATED WARRANTY FAILS OF ITS ESSENTIAL PURPOSE.

10.3.5 Termination

This agreement is effective until terminated. You may terminate this agreement at any time by uninstalling Software and destroying all copies of Software. This agreement will terminate immediately without notice from Sennheiser if you fail to comply with any provision of this agreement. Upon termination, you must uninstall Software and destroy all copies of Software.



10.4 Legal notice

Sennheiser gives no guarantee that the information provided on these Internet pages is complete, correct, or current (pictures, texts, prices, and other representations). Sennheiser reserves the right to make changes in or additions to the information provided at any time.

Sennheiser - neither the company, nor the management, nor the employees - assumes no liability for direct or indirect damages, including lost profits, resulting from or otherwise connected to the information provided on this website.

The aforesaid applies also to all links to which these Internet pages refer directly or indirectly. Sennheiser is not responsible for the content of a page that is reached through such a link.

The information does not represent an offer of sale. All prices indicated are non-binding.

Sennheiser is not liable for damages that result from calling up, downloading, or storing these pages or links.

© 2008 Sennheiser

All rights reserved. All texts, pictures, graphics, sound, video, and animation files, as well as arrangements, are subject to copyright and also in part to other laws for protection of intellectual property. They may not be used for business purposes, nor copied for forwarding, nor changed and used on other websites. The Internet pages of Sennheiser may also contain pictures that are subject to the copyrights of those who have provided them.



10.5 Service & Support

System	Contact
Sennheiser Service Support Center	Select your Contact Center: http://www.sennheiser.com/service-support
