



Olive Music center.



User's Guide.

IMPORTANT SAFETY INSTRUCTIONS

CAUTION: READ THIS USER MANUAL BEFORE OPERATING YOUR UNIT.

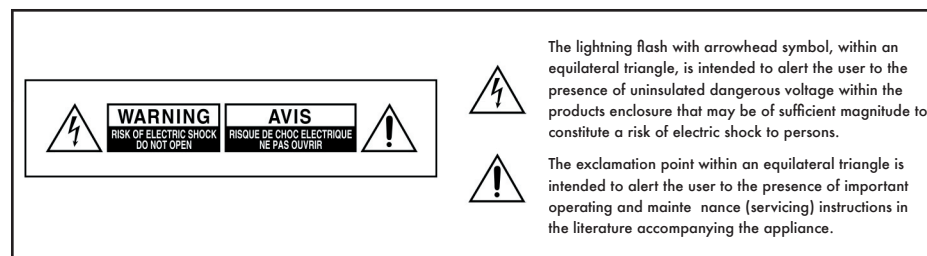
1. To assure the finest performance, please read this manual carefully. Keep it in a safe place for future reference.
2. Your Olive music center is designed for recording and playing back encoded digital audio signals and for the burning of audio CDs. Any other usage is explicitly excluded.
3. Install this unit in a cool, dry and clean place – away from windows, heat sources, sources of excessive vibration, dust, moisture and cold, which could damage its components. Avoid sources of humming (transformers, motors). To prevent fire or electrical shock, do not expose the unit to rain or water.
4. Water and Moisture - Do not use this product near water - for example near a bathtub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like. Avoid sudden temperature changes. Condensation water may be created inside the device whilst moving it from a cold to a warm location or using it in a moist room. The unit may no longer work properly. Should the situation arise, remove CD, CD-R or CD-RW from the unit, switch it off and wait at least an hour until the moisture evaporates. Caution: This device is not equipped with a moisture sensor.
5. Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions and should use a mounting accessory recommended by the manufacturer.
6. For your own safety do not attempt to open the case of the Olive music center, or disassemble it. You run the risk of electric shock and voiding the limited warranty. No user-serviceable parts are inside. Contact your dealer if something drops into the case.
7. Do not use force on switches, controls or connection wires. When moving the unit, first disconnect the power plug and the wires connected to other equipment. Never pull the wires themselves, only the plugs.
8. Do not attempt to clean the unit with aerosol sprays, chemical solvents, alcohol, or abrasives, or to remove dust with air pressure; this might damage the finish or affect the performance. Use a clean, soft and dry cloth. Unplug the product from the wall outlet before cleaning.
9. Be sure to read the "HELP" section regarding common operating errors before concluding that the unit is faulty.
10. Before plugging your unit into the AC main supply, make sure that the voltage indicated at the back of the unit complies with the local main voltage.
11. When planning not to use this unit for long periods of time (i.e. vacation, etc.), disconnect the AC power plug from the wall outlet. Doing so, always grab the plug, never the cable itself.
12. To prevent lightning damage, disconnect the AC power plug when there is an electrical storm.
13. This unit is not to be disconnected from the AC power source if it is in standby mode. Doing so might damage your Olive music center.
14. Never force a connector into a port. If the connector and port do not join with reasonable ease, they probably don't match. Make sure that the connector matches the port and that you have positioned the connector correctly in relation to the port.
15. Environmental notice: Batteries – even those containing no heavy metal – may not be disposed of in household waste. Used batteries must be disposed of properly in appropriate waste sites according to local environmental regulations.
16. Heed Warnings - All warnings on the product and in the operating instructions should be adhered to.
17. Attachments - Do not use attachments not recommended by the product manufacturer as they may cause hazards.

18. **Ventilation** - Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating. Do not block any ventilation openings. The openings should never be blocked by placing the product on a bed, sofa, rug or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack mount.
19. **Grounding or Polarization** - If this product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other), it will fit into the outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug does not fit into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug. If this product is equipped with a three-wire grounding type plug, a plug having a third (grounding) pin, it will only work in a grounding type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding type plug.
20. **Power Cord Protection** - Power-supply cords should be protected from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the product.
21. **Overloading** - Do not overload wall outlets, extension cords or integral convenience receptacles as this can result in a risk of fire or electric shock.
22. **Object and Liquid entry** - Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
23. **Damage Requiring Service** - Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
24. **Replacement Parts** - When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part.

Unauthorized substitutions may result in fire, electric shock, or other hazards.

25. **Safety Check** - Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
26. **Heat** - Do not install near any heat source such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

The manufacturer of this device shall not be liable for damage or loss of data including but not limited to music recorded to storage devices. It is the customer's responsibility to maintain the original media and/or appropriate backup copies within the specific rights of the media's copyright holder.



FCC APPROVAL

CAUTION: This product satisfies FCC regulations when shielded cables and connectors are used to connect the unit to other equipment. To prevent electromagnetic interference with electric appliances such as radios and televisions, use shielded cables and connectors for connections.

FCC RADIATION EXPOSURE STATEMENT: This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 8 inch between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Subpart J, Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

STATEMENT REQUIRED BY 15.19 AND RSS210

Changes or modifications may cause this unit to fail to comply with Part 15 of the FCC Rules and may void the user's authority to operate the equipment. This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada.

Operation is subject to the following two conditions:

- this device may not cause harmful interference, and
- this device must accept any interference received, including interference that may cause undesired operation.

CAUTION

- Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
- The use of optical instruments with this product will increase eye hazard. Information to User Alteration or modifications carried out without appropriate authorization may invalidate the user's right to operate the equipment.



LASER SAFETY: This unit employs a LASER. Only a qualified person should remove the cover or service the device, due to possible eye injury.

"CAUTION - USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURE OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE."

CD handling Precautions:

- Handle discs carefully so as not to damage or scratch the front side. Always keep the disc surface clean.
- Do not use a disc with a special shape
- For best performance when recording from a CD try to maintain a temperature of 95°F or less in the room where the Music Server is located.

MANUAL DISCLAIMERS

At the time of printing, the screen shot images in this manual matched the interface screens. However, since the music server has the capability of downloading software updates and enhancements on a regular basis, the resulting screen updates may no longer match the images in this manual. Check the Olive website for more information on software updates.

COPYRIGHT NOTICE

This equipment must not be used for unauthorized duplication of CDs or any other works protected by copyright. No license to infringe copyright is granted by the sale of this equipment. Recording and playback of some material may require permission.

For further information refer to the following:

- Copyright Act 1956
- Dramatic and Musical Performers Act 1958
- Performers Protection Acts 1963, and 1972
- Any subsequent statutory enactments and orders.

TRADEMARKS & SERVICE MARKS

The Olive logo is a trademark of Olive Media Products, Inc. Other product names mentioned herein are used for identification purposes only and may be trademarks of their respective companies.



UPnP enabled by TwonkyVision, www.twonkyvision.com



Fraunhofer
Institut
Integrierte Schaltungen

MPEG Layer-3 audio coding technology licensed from
Fraunhofer IIS and Thomson.

Music recognition technology and related data are provided by FreeDB. For more information visit www.freedb.org.

LPGL LIBRARY WRITTEN OFFER

This product contains Linux 2.4.26, that is made available under the GNU GPL license version 2 (hereafter called "the Program").

Olive Media Products, Inc. hereby offers to deliver or make available, upon request, for a charge no more than the cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code of the Program on a medium customarily used for software interchange.

Please contact: Olive Media Products, Inc.
555 Howard Street
San Francisco, CA 94105
USA

This offer is valid for a period of three years after the date of purchase of this product.

GPL PACKAGE WRITTEN OFFER

This product contains Linux 2.4.26, that is made available under the GNU GPL license version 2 (hereafter called "the Program").

Olive Media Products, Inc. hereby offers to deliver or make available, upon request, for a charge no more than the cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code of the Program on a medium customarily used for software interchange.

Please contact: Olive Media Products, Inc.
555 Howard Street
San Francisco, CA 94105
USA

This offer is valid for a period of three years after the date of purchase of this product.

WARRANTY

Olive Media Products, Inc. ("Olive") warrants this hardware product against defects in materials and workmanship for a period of one (1) year from the date of original retail purchase. If a defect exists, Olive will, at its option:

- (1) Repair the product at no charge, using new or refurbished replacement parts, or
- (2) Exchange the product with a product that is new or which has been manufactured from new or serviceable used parts and is at least functionally equivalent to the original product.

A Replacement product assumes the remaining warranty of the original product, or 90 days, whichever provides greater coverage. When a product or part is exchanged, any replacement item becomes your property and the replaced item becomes Olive's property.

Exclusions and Limitations

Olive is not liable for any damage to or loss of any programs, data, or other information stored on any media not covered by this warranty. Recovery and reinstallation of system and application software and user data are not covered under this Olive Limited Hardware Warranty. This warranty does not apply: (a) to damage caused by accident, abuse, misuse, misapplication, or non-Olive products; (b) to damage caused by service (including upgrades and expansions) performed by anyone who is not a Olive Authorized Service Provider.

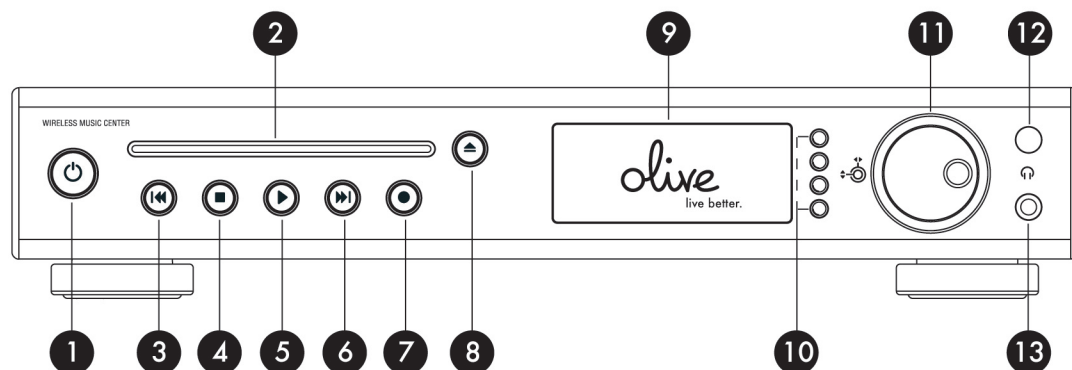
THIS WARRANTY AND REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL OR WRITTEN, EXPRESS OR IMPLIED. OLIVE SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IF OLIVE CANNOT LAWFULLY DISCLAIM IMPLIED WARRANTIES UNDER THIS LIMITED WARRANTY, ALL SUCH WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY.

CONDITIONS, WHETHER ORAL OR WRITTEN, EXPRESS OR IMPLIED. OLIVE SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IF OLIVE CANNOT LAWFULLY DISCLAIM IMPLIED WARRANTIES UNDER THIS LIMITED WARRANTY, ALL SUCH WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY.

OLIVE IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY, INCLUDING BUT NOT LIMITED TO LOST PROFITS, DOWNTIME, GOODWILL, DAMAGE TO OR REPLACEMENT OF EQUIPMENT AND PROPERTY, ANY COSTS OF RECOVERING, REPROGRAMMING, OR REPRODUCING ANY PROGRAM OR DATA STORED IN OR USED WITH OLIVE PRODUCTS, AND ANY FAILURE TO MAINTAIN THE CONFIDENTIALITY OF DATA STORED ON THE PRODUCT. OLIVE SPECIFICALLY DOES NOT REPRESENT THAT IT WILL BE ABLE TO REPAIR ANY PRODUCT UNDER THIS WARRANTY OR MAKE A PRODUCT EXCHANGE WITHOUT RISK TO OR LOSS OF PROGRAMS OR DATA.

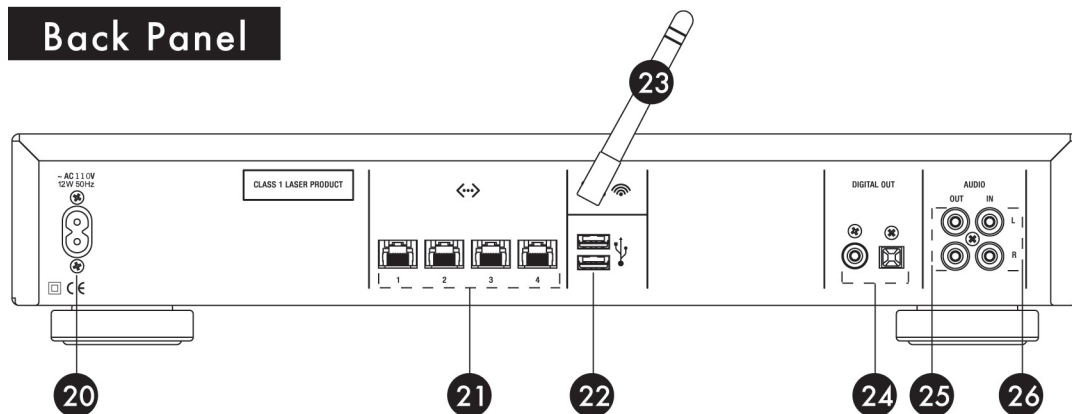
Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages or exclusions or limitation on the duration of implied warranties or conditions, so the above limitations or exclusions may not apply. This warranty gives you specific legal rights, and you may also have other rights that vary by state or province.

Front Panel



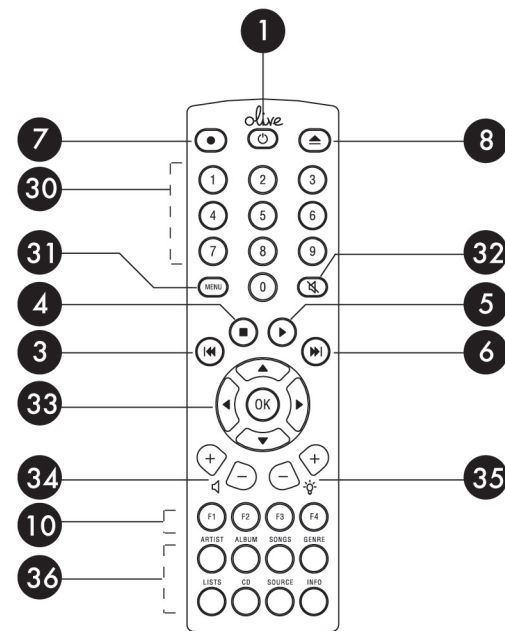
- | | | | | |
|------------------|--------------|------------|----------------------|--------------------------|
| 1 On/Off | 4 Stop | 7 Record | 10 Function keys | 12 Remote control sensor |
| 2 CD slot | 5 Play/Pause | 8 Eject CD | 11 Turn&Select wheel | 13 Headphones |
| 3 Previous track | 6 Next track | 9 Display | | |

Back Panel



- | | | |
|--|----------------------------------|----------------------------|
| 20 Power mains connection | 22 USB ports | 24 Digital audio lines out |
| 21 Ethernet 10/100MBit (4 port switch) | 23 Wirelessnetworkantenna (WLAN) | 25 Analogue audio line out |
| | | 26 Analogue audio line in |

Remote Control



- | | |
|------------------|-----------------------------|
| 1 On/Off | 30 Keypad |
| 3 Previous track | 31 Menu |
| 4 Stop | 32 Mute |
| 5 Play/Pause | 33 Navigation |
| 6 Next track | 34 Volume |
| 7 Record | 35 Brightness |
| 8 Eject CD | 36 Additional function keys |
| 10 Function keys | |

USER MANUAL

Both the product described in this user manual and the documentation are protected by copyright law. Copyright remains with the author. Software and documentation may not be copied, reproduced, translated or distributed in any form, not even in part, without prior written consent by the copyright owner.

The authors decline any liability with regard to the software described herein. They do not make any warranties for the correctness of the contents of this documentation, nor are they liable for any direct or indirect damages which may arise from the use of, or the inability to use, either the software or the accompanying documentation, even if the possibility of such damages may have been brought to their attention.

The authors do not assume responsibility for any bugs or defects in the software. This restriction of liability extends also to their distributors and retailers.

Trademarks and registered trademarks are acknowledged. They remain the exclusive property of their owners. Absence of such an identification does not constitute a breach of trademark protection.

1st edition	Olive Media Products Inc.
© September 2005 Olive	555 Howard Street
Email: connect@olive.us	San Francisco, CA 94105
http://www.olive.us	Tel.: +1 415.908.3870
	Fax: +1 415.908.3932

SUPPORT

Should you need some help with your music center, please contact Olive Media Products as follows:

Email:	care@olive.us
Hotline:	+1 415.908.3870 (Monday – Friday: 8am - 5pm, Pacific Standard Time)

CONTENTS

1	INTRODUCTION				
1.1	About this user manual	3	2.1.8	Analog recording	9
1.2	What is a music center?	3	2.1.9	Settings	9
1.3	First steps	3	2.1.10	Info	9
1.3.1	Checking parts list and finding a place	3	2.1.11	Music server	9
1.3.2	Connecting	3	2.1.12	Internet Radio	9
1.3.3	Getting started	3	2.1.13	Import	9
1.3.4	Trying a music CD	4	2.2	Playing a music CD	10
1.4	The operating keys	4	2.3	Importing a music CD	10
1.4.1	On/Off (1)	4	2.4	Playing songs	10
1.4.2	CD slot (2)	4	2.5	Copying a music CD	11
1.4.3	Control buttons (3) to (6)	4	2.6	Burning a music CD	11
1.4.4	Record (7)	5	2.7	Header icons	11
1.4.5	Eject CD (8)	5	3	ADVANCED FUNCTIONS	
1.4.6	Display (9)	5	3.1	Playlists	12
1.4.7	Function keys (10)	5	3.1.1	Create a new playlist	12
1.4.8	Turn&Select wheel (11)	5	3.1.2	Renaming or deleting an existing playlist	13
1.5	The remote control	6	3.1.3	Playback of a playlist	13
1.5.1	Keypad (30)	6	3.2	Searchlists (Smart playlists)	13
1.5.2	Menu (31)	6	3.2.1	Create a new searchlist	13
1.5.3	Mute (32)	6	3.2.2	Edit an existing searchlist	15
1.5.4	Navigation (33)	6	3.2.3	Playback of a searchlist	15
1.5.5	Volume (34)	6	3.3	Meta data	15
1.5.6	Brightness (35)	6	3.3.1	Editing meta data	15
1.5.7	Additional function keys (36)	6	3.4	Digitizing sounds of vinyl records and analog music tapes	16
2	THE BASICS		3.4.1	Connecting an input device	17
2.1	Main menu	7	3.4.2	Creating a new recording	17
2.1.1	Audio CD	7	3.4.3	Adjusting the record level	17
2.1.2	Artists	7	3.4.4	Start the recording	17
2.1.3	Albums	7	3.4.5	Editing the recorded file	18
2.1.4	Songs	8	3.4.6	Importing the tracks	19
2.1.5	Genres	8	3.5	Internet Radio	20
2.1.6	Playlists	8	3.5.1	Custom...	20
2.1.7	Searchlists (Smart playlists)	8	3.5.2	Top 100...	20
			3.5.3	Predefined stations	20
3.5.4	Receiving a radio broadcast	21			
3.6	Connecting an MP3 player	21			
3.7	Backup your music collection	22			
4	SETTINGS	23			
4.1	Language	23			
4.2	Date & Time	23			
4.3	Play mode	23			
4.3.1	Dynamics compression	24			
4.4	Appearance	25			
4.5	Import from CD	25			
4.6	Analog recording	26			
4.7	Burning	27			
4.8	Network	27			
4.9	Services	27			
4.10	CD database	27			
4.11	Device name	28			
4.12	Factory settings	28			
4.13	Recovery	28			
5	NETWORKING				
5.1	The center of your music	29			
5.2	A member of your home network	30			
5.3	Your music center and iTunes	30			
5.4	Your music center and UPnP/AV satellites	31			
6	USING A WEB BROWSER FOR MANAGING YOUR MUSIC CENTER				
7	ADVANCED NETWORKING				
7.1	Ports	34			
7.2	Network modes	34			
7.3	IP addressing	35			
7.4	Network connection	35			
7.5	Web Proxy	35			

CONTENTS

7.6	WLAN	35
7.7	Copying music from a PC to your music center	36
7.8	Copying music from your music center to a PC	37
8	HELP!	
8.1	"My music center is dead..."	37
8.2	Recovery CD	37
8.3	Software update	38
8.3.1	Software update via Internet	38
8.3.2	Software update using a CD	38
8.4	Useful key combinations	38
8.5	Overview of all menu options	39
8.6	Frequently Asked Questions	40
9	TECHNICAL DATA	

1 INTRODUCTION

1.1 About this user manual

This manual applies for both music centers, the Symphony and the Musica. Since the software of your music center is maintained and updated continuously the software version of your device may differ from the one described here. This may show in some minor differences in the wording of messages or design of screens.

1.2 What is a music center?

Your music center stores all of your music library and enables you to find and play single tracks, complete CDs or your own selections quick and easy. You may use it as a CD player, you can import tracks from Audio CD and other sources into it, and you are able to produce your own CD - obeying the Copyright Laws of your country - from its content. Additionally, your music server can be connected to a computer network and may distribute its music to other devices (satellites) based in various rooms.

The front panel of your music center provides you with a few buttons, a backlit display and the easy-to-use Turn&Select wheel. The display shows the contents of the music center and the menus for operating it. An additional remote control gives you the couch option and even your PC may be used for controlling the music center.

1.3 First steps

1.3.1 Checking parts list and finding a place

Having unpacked your music center, it's a good idea to check now to see that you have all the pieces. Besides the music center itself and this manual you should find the following items:

- Power cord,
- Cinch audio cable,
- Optical Toslink audio cable (Musica only),
- Remote control and batteries,
- WLAN antenna,
- Recovery CD-ROM,
- Registration card.

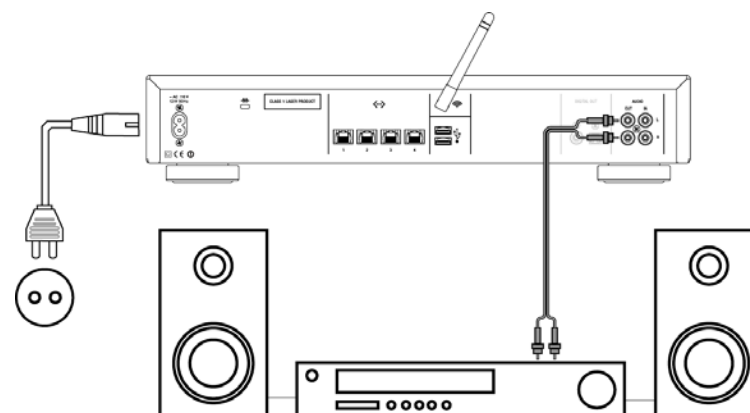
Put the music center on secure, level surface within the reach of your Hi-fi components.

1.3.2 Connecting

Connect the output from the music center "AUDIO OUT" (25) to the input jacks of your stereo amplifier or Hi-fi component, matching the red plug to R (right) and the black or white plug to L (left). Watch out for a secure seating of the plugs to avoid noise.

If the music center should communicate with other devices wireless, screw the WLAN antenna into the thread (23) at the back.

Connect device's AC power receptacle (20) with a power plug.



1.3.3 Getting started

Turn on your Hi-fi system, your receiver, or your amplifier. Choose the appropriate audio input channel and turn the volume all the way down. Remove the protective film from the music center's display (6) and use the On/Off button (1) at the front panel to turn it on.

The display gets lit and the music center needs about 40 seconds for the initialisation. When the music center logo appears on the display it is operational and soon you are asked for choosing your preferred language:

Choose your language	English
Wählen Sie Ihre Sprache	Deutsch
Choisissez votre langue	Français

Select function key 1 “English” to switch to the English language. Immediately the display shows everything in English.

Symphony	15:27	Info
Artists		Help
Albums		
Songs		
Genres		
Playlists		
Searchlists		

For changing the language later on, please refer to chapter 4 «Settings» on page 23.


1.3.4 Trying a music CD

For a first test of your music center simply insert you favourite music CD into the slot (2) at the front. If this CD is known already to the internal database its title and artist are displayed on the screen:

Symphony	16 03	Import
Abbey Road		Copy
Artists		Information
Albums		More...
Songs		
Genres		
Playlists		

Otherwise generic descriptions are displayed.


Symphony	16 02	Import
Audio CD		Copy
Artists		Information
Albums		More...
Songs		
Genres		
Playlists		

Just press the Play button (5 ) on the front. Your music center starts playing the first track of the CD and shows the current song info on the display:

Abbey Road	15:48	Information
Come Together		Now Playing
The Beatles		Random
Abbey Road		Repeat
00:12	-04:08	04:20

resp.

Audio CD	15 51	Information
Track 01		Now Playing
Unknown		Random
Unknown		Repeat
00:17	-04:03	04:20

The buttons beneath the CD slot look and operate identical to buttons on CD players or similar equipment. You can skip tracks forward and backward, pause and restart the playing or stop it. The Eject button (8 ) to the right of the CD slot (2) returns the CD to you.

1.4 The operating keys

Please see the drawing representing the music center’s front and remote control. The bracketed numbers refer to the numbers in these drawings.

1.4.1 On/Off (1)

This button switches the music center on or off. Switching off whilst shortly pressing this button puts the music center in a sleep mode with minimal power consumption. Coming back into operation then is just a matter of a few seconds.

To switch off the music center completely keep this button pressed for about 3 seconds and release it when the display shows a closing “curtain”. Holding the button for a longer time yields to an internal hardware reset.



Any time you unplug the music center from the power supply, it needs the initialisation time of about 40 seconds to become operational again.

1.4.2 CD slot (2)

Insert the music CD printed side up until the mechanism catches it.

Have a look at the main menu of the display to make sure that there is no CD already inserted in the slot. Otherwise your CDs and device could be damaged.

1.4.3 Control buttons (3) to (6)

These buttons control the playing of songs of music CDs or the tracks stored inside the music center. The Play/Pause button (5 ) starts a song and the Stop button (4 ) ends it.

Additionally, the Play/Pause button (5) pauses the playback and allows to continue at the same position.

The Previous Track (3 ⏮) / Next Track (6 ⏭) buttons skip a track of a CD or a list in the given direction on every short push. Keep these buttons pressed for fast forward or rewind within the track.

While playing a list of songs (artist, album, playlist, ...) you may choose any other song and press the Previous Track (3 ⏮) button. The current song will be played to its end and then the newly chosen one is started. Pressing the Play/Pause button (5 ⏸) instead, it stops the current song and starts immediately the newly chosen.

Each button shows its activity with a pulsing white light.

1.4.4 Record (7) ⏺

The Record button (7) is used for different functions depending on the chosen menu item. In all cases music is transferred from one place to another.

Menu: Audio CD or tracks - CD or tracks will be imported into the music center.

Menu: Import - Audio files inside the "Import" folder will be imported into the music center.

Menu: Artists/Albums/Songs/Lists - The songs of the artist, the album, or the list will be burned on a CD-R.

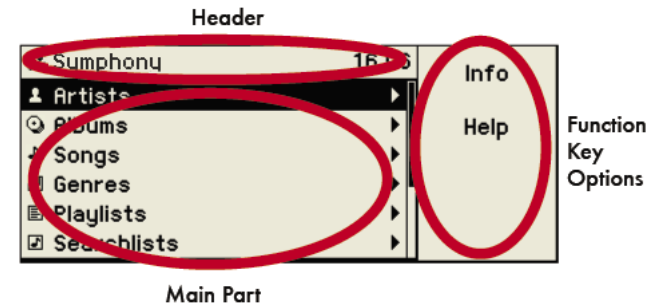
Menu: Analogue Recording - Signals at the Audio In port are digitised and will be imported into the music center.

1.4.5 Eject CD (8) ⏏

The playback of a CD is stopped and it is ejected. You can then remove it.

1.4.6 Display (9)

The display shows the current state of the music center and enables its usage besides the buttons. It is divided into three parts: Header, main area, and the current assignment of the function keys.

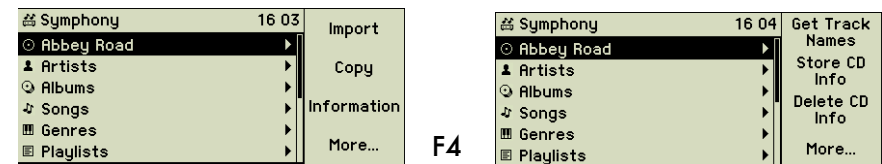


The header shows the name of your device, the current time, and by various icons the current activities of the music center. The main area shows the menu options which are navigated by the Turn&Select wheel (11) or information on the currently played, imported, or burned song. On the right the options of the four function keys are displayed.

After five minutes of inactivity the screen saver is started. Touching the wheel or a control key brings the display contents back.

1.4.7 Function keys (10)

Pressing a function key executes the displayed action. Not all keys are used always. If the current situation has more than four options, function key 4 shows "More..." and enables you to toggle between the option sets.



1.4.8 Turn&Select wheel (11)

This genius gadget consists of two parts, the inner wheel and the outer ring. They are independently turnable. The inner wheel moves the menu selection up and down, and the outer ring chooses a menu option when turned right. Turning the outer ring left, one menu level up is reached again. This description sounds a lot more complicated than really doing it! After a few minutes you got used to this easy way of navigating through menus and will never think about it again.

While songs are playing turning the inner wheel starts a fast forward or rewind like pressing the control keys 3 (⏮) and 6 (⏭) for long.

If headphones are connected and the music center is playing music the inner ring controls the volume of the headphones output.



1.5 The remote control

The remote control device is a second way to control the functions of the music center. Its keys duplicates all the buttons on the front panel. Please refer to the illustration page for details. The bracketed numbers refer to the numbers in this drawing.

The On/Off switch (1), the control elements (3) to (8) and the function keys (10) are identical to the same buttons on the front panel of the music center (except fast forward and rewind). They are discussed earlier in this chapter.

1.5.1 Keypad (30)

You may address an individual track of a music CD or of a list contained on the music center directly by its number. Use the numerical keypad to enter the number.

The keypad can be used to enter textual information like meta data. It works like the keypad of a mobile phone.

The keypad has this layout:

Key	Edit: 1. character, also after space	Edit: 2. character, also after space	Browse: Artists, albums, songs	Browse: Albums
0	0@_-*#[>()+=	0@_-*#[]()+=	0@_-*#[>()+=	0
1	1./,?':;&~!	1./,?':;&~!	1./,?':;&~!	1
2	ABCCabc2	abcABC2	abc2	2
3	DEFdef3	defDEF3	def3	3
4	GHIghi4	ghiGHI4	ghi4	4

5	JKLjkl5	jklJKL5	jkl5	5
6	MNOmno6	mnoMNO6	mno6	6
7	PQRSpqrs7	pqrsPQRS7	pqrs7	7
8	TUVtuv8	tuvTUV8	tuv8	8
9	WXYZwxyz9	wxyzWXYZ9	wxyz9	9

1.5.2 Menu (31)

A shortcut to the main menu of the music center.

In edit mode this key toggles between upper case, lower case, and special characters (umlauts).

1.5.3 Mute (32)

Toggles the volume of the output between zero and your preset value.

1.5.4 Navigation (33)

According to the function of the Turn&Select wheel you can navigate using these keys through the menus of the music center. The centred "OK" key is equivalent to function key 1, which almost everywhere confirms the chosen action.

1.5.5 Volume (34)

Adjusts the level of the Audio Out port, which usually is connected to your stereo components.

1.5.6 Brightness (35)

Adjusts the level of the background lighting of the keys.

1.5.7 Additional function keys (36)

These keys directly select main menu options. They are labelled accordingly to the options. "Source" is temporarily unused. "Info" shows either the general statistics or, while playing a song, its meta data.

2 THE BASICS

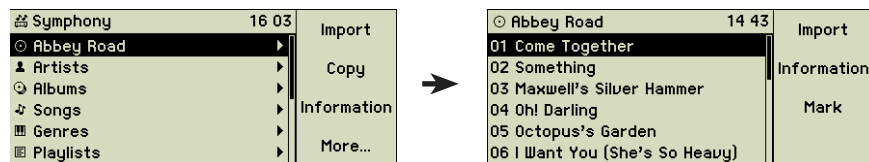
This chapter explains the basic functionality of your music center. Some details are intentionally omitted to keep these sections simple. The next chapters go more into detail.

2.1 Main menu

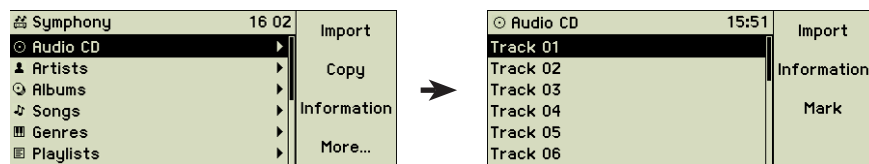
Besides the buttons on the front panel or the remote control the menu option shown on the display are your main control of the music center. The main menu gives you access to the various parts of the software. Function key 1, the top one, mostly shows “Info” for the overall statistics of your music center as well as its serial number, and function key 2 mostly shows “Help” for context-sensitive help at your finger tips.

2.1.1 Audio CD

If a music CD is loaded into the CD slot, this menu option is at the top.

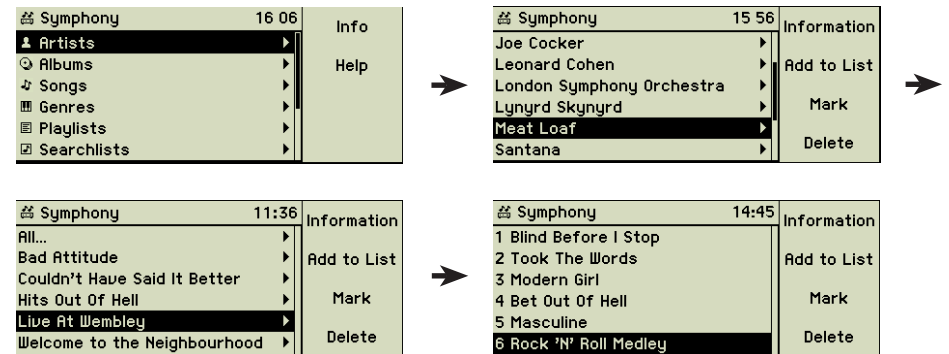


To the right of the CD you find the list of its tracks. The position of the cursor in the menu structure defines the selection of songs played or imported. If the title information of the music CD could not be found in the internal database and if an Internet access is not available or enabled, generic descriptions are displayed here:




2.1.2 Artists

This reveals an alphabetical list of all artists found on your music center.

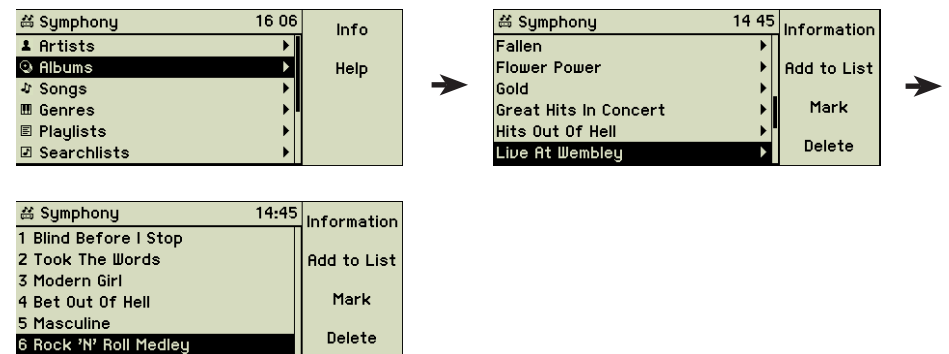


Behind each artist you find the list of his/her albums and behind each album its songs. These lists are filled by importing songs into the music center. “All...” shows all songs of the chosen artist including songs which are not part of an album.

The cursor defines the set of songs to be played or added to a list. Is the cursor on the name of an artist and you press the Play/Pause button (5 ) , all albums and songs of this artist are played one after another. Is the cursor on the name of an album and you press the same key, the songs of this album are played only.

2.1.3 Albums

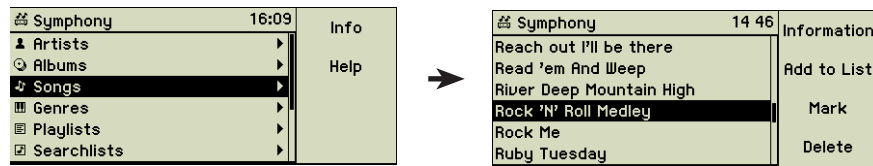
This reveals an alphabetical list of all albums found on your music center.



Behind each album you find its songs. These lists are filled by importing songs into the music center. The cursor defines the set of songs to be played or added to a list.

2.1.4 Songs

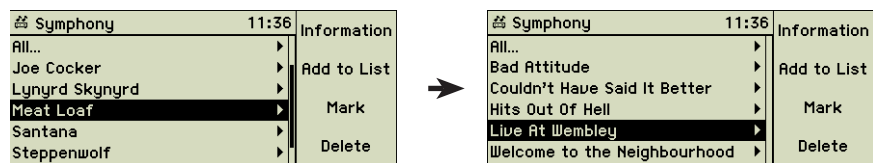
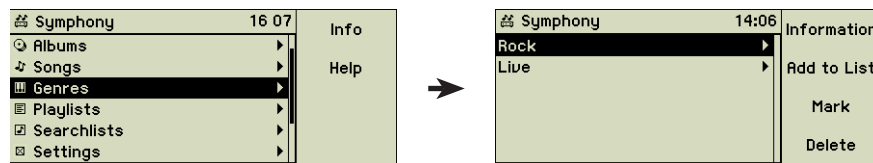
This reveals an alphabetical list of all songs found on your music center.



This list is filled by importing songs into the music center. The cursor defines the set of songs to be played or added to a list.

2.1.5 Genres

This option provides a list of genres in which your songs, albums, or artists are categorized.

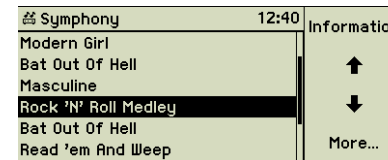
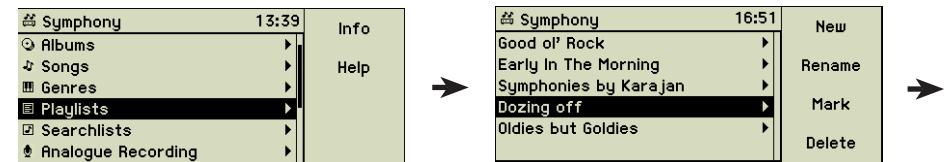


Behind every genre you find the list of artists, albums, and songs assigned to this genre. "All..." shows all songs of the chosen genre including songs which are not part of an album.

Genres without assigned songs are not visible here. But you may chose from all genres when assigning one to a song or an album. You may add your own genre by just typing an appropriate text into the genre field of a song, album, or artist.

2.1.6 Playlists

Using this option you can create your own selections of songs and group them together. The right music for every mood can be collected here.

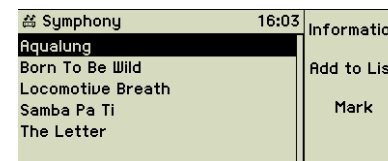
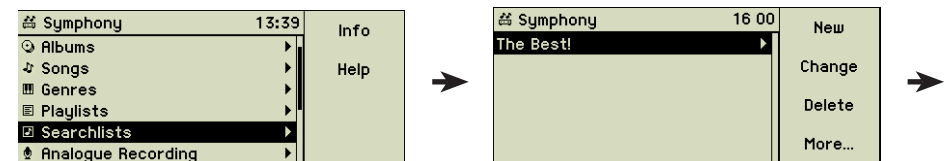


For detailed explanation about how to add a new playlist, please refer to section 3.1 «Playlists» on page 12.

2.1.

7 Searchlists (Smart playlists)

You can create searchlists based on different selection criteria - so-called smart playlists. These lists are dynamic as the content of a list depends on the available set of songs on your music center. And changing attributes of songs, albums, or artists will change the contents of these lists immediately.



For detailed explanations about how to add a new searchlist, please refer to section 3.2 «Searchlists (Smart playlists)» on page 13.

2.1.8 Analog recording

Your music center can digitize and import sound from analogue sources, like turntables, tape recorders, or cassette decks.

🎵 Symphony	13:40	Info
📁 Genres	▶	
📁 Playlists	▶	Help
🔍 Searchlists	▶	
🎧 Analogue Recording	▶	
⚙ Settings	▶	
📄 Info	▶	

For detailed explanations about how to do such a recording, please refer to section 3.4 «Digitising sounds of vinyl records and analog music tapes» on page 16.

2.1.9 Settings

This menu option opens the area of setting and configuring the music center. This starts with simple things like date and time or the name of the music center and goes as far as advanced configuration of a wireless network. A separate chapter deals with these topics (chapter 4 «Settings» on page 23).

🎵 Symphony	13:40	Info
📁 Playlists	▶	
🔍 Searchlists	▶	Help
🎧 Analogue Recording	▶	
⚙ Settings	▶	
📄 Info	▶	
🌐 Music Server	▶	

2.1.10 Info

General statistic information about the music center.

🎵 Symphony	13:40	Info
📁 Playlists	▶	
🔍 Searchlists	▶	Help
🎧 Analogue Recording	▶	
⚙ Settings	▶	
📄 Info	▶	
🌐 Music Server	▶	



🎵 Symphony	11:43	Software Update
Version:	2.0	
Serial No:	012345	
Disc size:	80 GB	
Free space:	86%	
Artists:	249	
Albums:	134	

🎵 Symphony	11:43	
Free space:	86%	
Artists:	249	
Albums:	134	
Songs:	1753	
Genres:	7	
CD Database:	06.03.2005	

The version number of the system software and the serial number can be accessed here. You need it for the registration of your music center.

You can see the available space, the number of stored songs, how many artists and albums are collected, the date of the CD database, and other statistical information.

If your music center is connected to the Internet you may update your system software using function key 1. See section 8.3 «Software update» on page 38.

2.1.11 Music server

If the music center is integrated into a network, other networked music centers and compatible music servers like iTunes on Mac OS or Windows are listed here. Obviously their music collections must be published to be seen here.

🎵 Symphony	13:40	Info
📁 Playlists	▶	
🔍 Searchlists	▶	Help
🎧 Analogue Recording	▶	
⚙ Settings	▶	
📄 Info	▶	
🌐 Music Server	▶	



🎵 Symphony	12:47	Select
🎵 Symphony		
🎵 iMac home office		Help

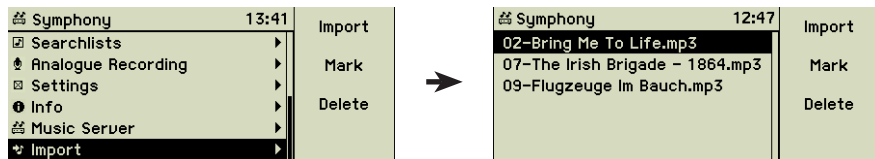
2.1.12 Internet Radio

If your music center is connected to the Internet you can receive Internet radio stations and play their broadcasting. This opens an additional source of unlimited music.

🎵 Musica	15:05	Info
🎧 Analogue Recording	▶	
⚙ Settings	▶	Help
📄 Info	▶	
🌐 Music Server	▶	
📻 Internet Radio	▶	
📁 Import	▶	

2.1.13 Import

If the music center is integrated into a network, other computers can copy music files to the import folder of your music center. This menu option gives you the choice of importing some or all of them.



To import all available files and folders select function key 1 "Import" from the main menu.

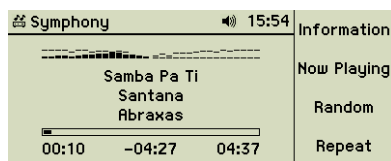
The import process does not do any encoding of the files. Your music files have to be in a file format the music center is able to play, before you start to import them. And there is no check on double entries by the music center.

Note: This menu option is visible only if the import folder contains data.

2.2 Playing a music CD

Insert the CD into the slot (2). If the meta data of the CD is available in the internal database, title and artist are displayed automatically. Depending on the settings and the availability these information can be searched for in the Internet database.

Depending on the settings the CD starts playing automatically. Otherwise you may choose a song and play it by pressing the Play/Pause button (5) button. While the song is playing, artist, album title, and song title are displayed. Long names are displayed alternating from the left to right. Again depending on your settings, run time, total time, and remaining time, playlist, index of the song in the playlist and total songs of the playlist or a spectrogram can be displayed.



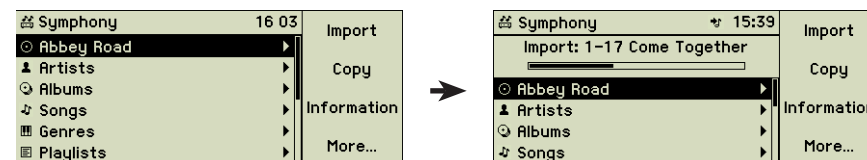
The control buttons (3) - (6) give you the options to pause the playing, to stop it, and to jump forwards or backwards. The Eject button (8) returns the CD to you.

2.3 Importing a music CD

The recording of a CD happens in two steps: the music center first records the music files on the hard disk without any compression or encoding; the second step is the encoding of these files in the chosen format. After the music is recorded, you can eject the CD and insert the next one. Please note that both the music center and the record icons in the display header are still flashing.

This shows that the music center is still encoding the files of the first CD. During this operation, the handling of the music center may be not as quick and smooth as usual.

After inserting a music CD its title is shown as the topmost entry of the main menu. Press the Record button (7) or the function key 1 "Import" to import all tracks of the CD on the music center's hard disk. If you want to import only selected tracks, select and mark these tracks before starting the import.



The progress of the import is shown on the display. It is possible to listen to the songs while the importing takes place. Since the importing time is much shorter than the playing time, listening and importing is not in sync.

CDs which are not recognized by the CD database are labelled by the music center using the import date and time e.g. "Audio-CD 2005-01-01 10:12".

If you want to import songs already stored on the music center, you are presented with a choice of overwriting or skipping it.

After the import you may have a look at the "Info" window to check the encoding format and the amount of space of your imported files.

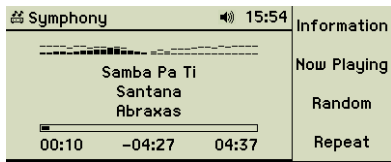


Duplication of copy-protected audio CDs may infringe copyright and digital rights laws of your country.

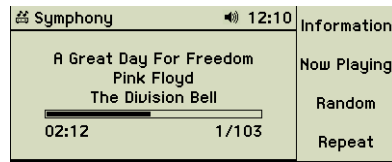
2.4 Playing songs

Use the menu options Artists, Albums, Songs, Genres, or Playlists to find the song or the songs you want to play. Then press the Play button (5) and the playback starts.

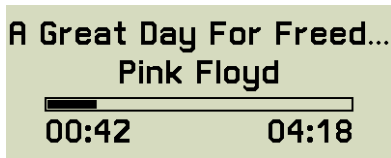
While the song is playing, artist, album title, and song title are displayed. Long names are displayed alternating from the left to right.



resp.



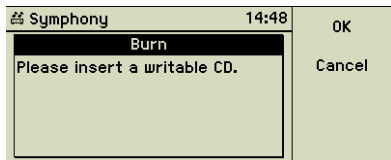
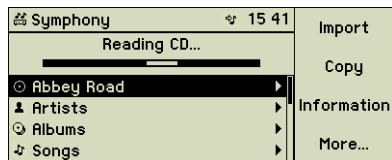
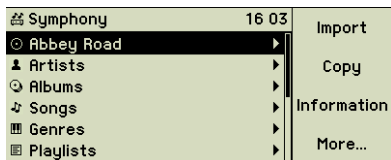
If the Large Play View option is enabled, the display switches after the preset time to this view. Now you may see the song title and artists right from your couch.



The control buttons (3) - (6) give you the options to pause the playback, to stop it, and to fast forward or rewind.

2.5 Copying a music CD

After inserting a music CD its title is shown as the topmost entry of the main menu. Press the function key 2 "Copy" to copy all tracks of the CD onto a second one.



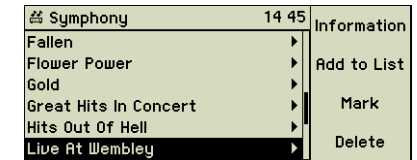
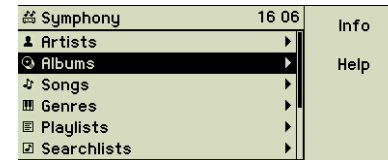
Your music center reads all tracks off the music CD and then asks you to insert a fresh CD-R into the CD slot (2). When a CD-R has been inserted, it begins the burning.



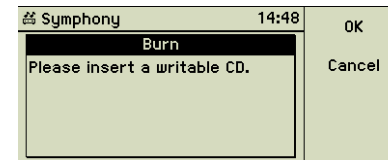
Duplication of copy-protected audio CDs may infringe copyright and digital rights laws of your country.

2.6 Burning a music CD

Choose an album or collect some songs into a playlist. Select the album or the playlist and press the Record button (7). The music center adds up the length of the songs and warns you if the total playing time exceeds the capacity of a CD-R.



(7)










The music center asks you to insert a fresh CD-R into the CD slot (2). After confirming with function key 1 "OK" the burn process starts. After an optional verifying the newly burned CD is ejected.

2.7 Header icons

The header line of the display often shows little icons, flashing, animated, or steadily. The following table shows the meaning of each one.

	Steady	The music center icon shows that the main menu is referring to the music library located on the music center.
	Flashing	The music center system is busy with a complex operation, e.g. with encoding of music files.
	Animated	A music CD is currently played back.
	Animated	The music center is currently encoding music tracks, e.g. from a music CD. This action is done at 3x speed. The encoding of one hour of music takes about 20 to 30 minutes, whereas the import of the music tracks is completed within 10 minutes using 10x speed.
	Animated	The music center is currently burning the chosen tracks on a music CD.
	Animated	The music center is currently writing tracks to other devices, for example on an MP3 player or to the music center backup hard disk.

	Animated	The music center accesses the network, e.g. an iTunes server.
	Steady	The iPod icon is shown in place of the music center's icon: an iPod is connected to the music center and has been selected. The main menu is now referring to the music library of the iPod.
	Steady	The iTunes icon is shown in place of the music center's icon: an iTunes server is connected to the music center over the network and has been selected. The main menu is now referring to the music library of the iTunes server.
	Animated	A music track is currently played back, the output volume is turned on.
	Steady	Mute is activated.
	Steady	Random mode is activated.
	Steady	Repeat mode is activated.

3 ADVANCED FUNCTIONS

This chapter discusses advanced options of the music center and shows their benefits using step-by-step explanations.

3.1 Playlists

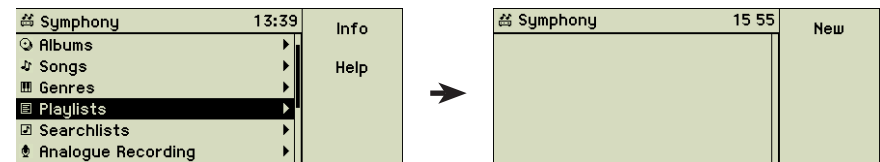
The music center maintains playlists for you. You create a list with a name of your choice and assign songs, albums, or artists to this list. With a playlist, you choose which songs to play and the order in which to play them.

You can create as many playlists as you want, include as many songs as you want in each playlist, and rearrange the songs in each playlist until the order is just right. You might have one playlist for exercising, one for a rainy Monday, another that contains the music for dozing off in the night, and so on.

3.1.1 Create a new playlist

Adding a new playlist

Choose the main menu option Playlists.

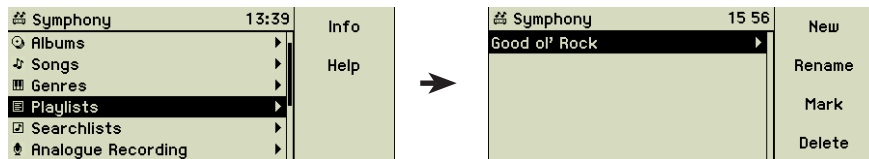


Press function key 1 "New" and enter the name of your first playlist.



Use the inner wheel of the Turn&Select wheel (11) to select a character from the alphabetic list at the bottom and choose it by turning the outer ring of the Turn&Select wheel (11) shortly to the right. Create the complete title using this technique. Function key 3 "Delete" and function key 4 "Insert" help correcting typos. When finished press function key 1 "OK" and the new, empty playlist is created.

Note: If you have a computer you can also create a playlist via the web interface (see page 32);

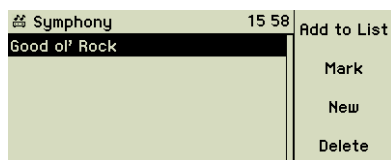


Adding songs to a playlist

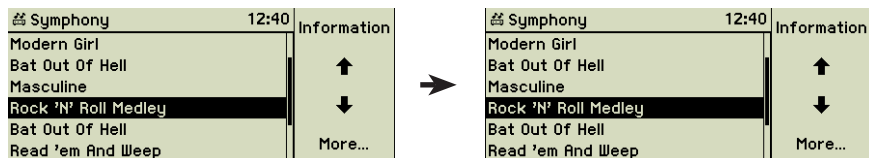
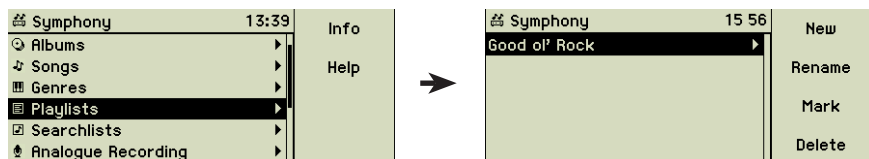
Choose from the main menu options Artists, Albums, or Songs the tracks you want to add to your new playlist. To select multiple entries mark the first one using function key 3 “Mark” and turn the inner wheel to extend the selection to the last entry you want to include.



When your selection is complete press function key 2 “Add to List”. You will see the list of all your playlists. For your convenience the last used list is pre-selected as the target.



Choose the playlist you want your songs assign to, and press function key 1 “Add to List”. Now all your selected songs are part of this playlist.



You can use the function keys 2 “Up” and 3 “Down” to rearrange the position of songs inside a playlist. Function key 4 “More...” reveals the second part of the options, including deleting and adding songs.

3.1.2 Renaming or deleting an existing playlist

You may rename or delete an existing playlist any time by selecting it from the list and using the appropriate function keys.

3.1.3 Playback of a playlist

To play a playlist, just choose it from the menu option Playlists and press the Play button (5). If the play mode is set to Repeat or Random the songs of the playlist are played in random order resp. the songs of the playlists are repeated forever. See section 4.3 «Play mode» on page 23 for additional information on these options.

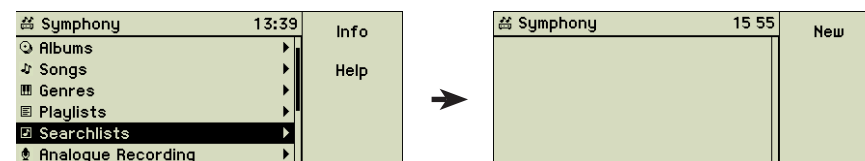
3.2 Searchlists (Smart playlists)

Searchlists are special playlists, which do not consists of a fixed set of songs, artists, or albums, but define their contents dynamically by search criteria you defined. If you add songs to your music center the searchlists are updated automatically to represent always the dynamic set you defined.

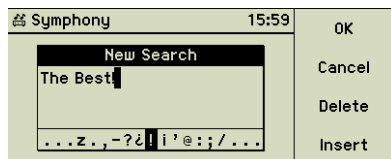
3.2.1 Create a new searchlist

Adding a new searchlist

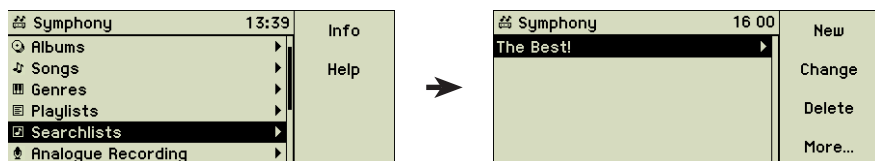
Choose the main menu option Searchlists.



Press function key 1 “New” and enter the name of your first searchlist.

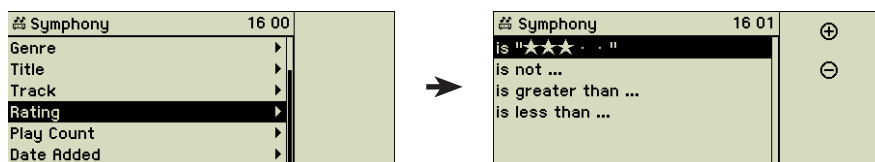


Press function key 1 "OK" and the new, empty searchlist is created.



Adding search criteria

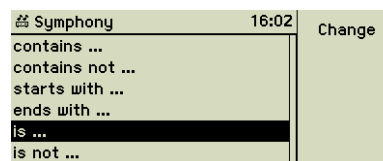
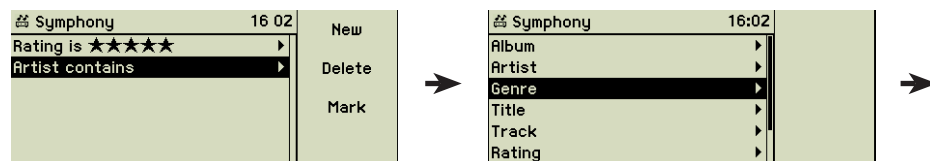
Choose the main menu option Searchlists, then your newly created list "The Best!" and press the function key 2 "Change" to define the first search criteria. Turning the inner wheel (11) right, you are presented with the list of all meta data and all this fields are available for composing search criteria. To achieve a list of the best and only the best songs the field Rating of the meta data has to be used. Only songs, albums, and artists with a five star top ranking are allowed.



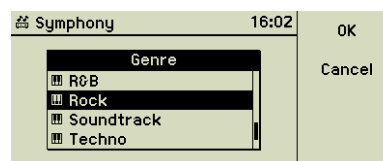
Use function key 1 "+" to enter the number of stars. When the five stars have been entered, turn the outer ring (11) of the Turn&Select wheel twice to the left, to get back two levels.



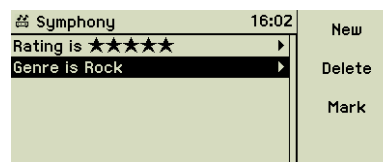
Now the first search condition is defined but we want also limit this special playlist to only one genre of music. Again press function key 1 "New" and a second criteria appears, showing "Artist contains" by default. Follow the right arrow to the list of meta data fields, choose Genre and further to the right to the conditions.



Use function key 1 "Change" to let the list of genres appear. The list shows all available genres including those without assigned songs.

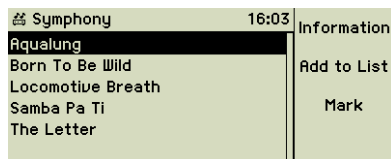
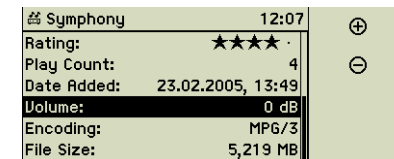
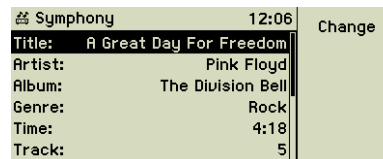
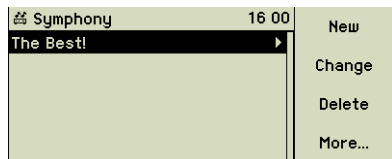
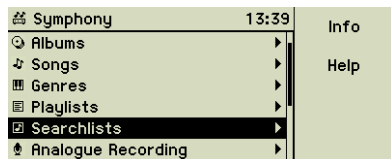


Choose one and confirm it pressing function key 1 "OK". Now the search criteria of our searchlists are completed.



Both search criteria are defined now. Turn the outer ring (11) of the Turn&Select wheel once to the left to get back to the list of searchlists.

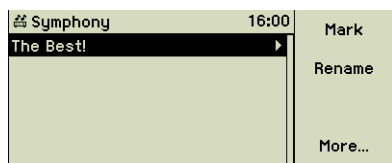
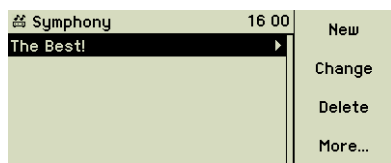
Whenever you are looking at the contents of this searchlist, you see only Rock songs with the Five-Star ranking. In the course of the years you may change the meta data of songs according to your changing personal preferences, this list will always show your most valued songs.



If the searchlist shows no entries the music center contains no songs matching your criteria.

3.2.2 Edit an existing searchlist

The criteria of searchlists may be changed at any time.



Select the searchlist from the list and use function key 2 "Change" to see and edit the search criteria. Searchlists may be renamed or deleted, too.

3.2.3 Playback of a searchlist

To play such a searchlist, just choose it from the menu option Searchlists and press the Play button (5). If the play mode is set to Repeat or Random the songs of the searchlist are played in random order resp. the songs of the searchlists are repeated forever. See section 4.3 «Play mode» on page 23 for additional information on these options.

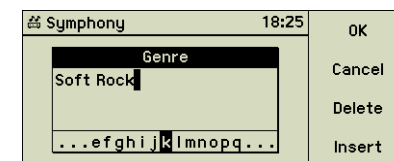
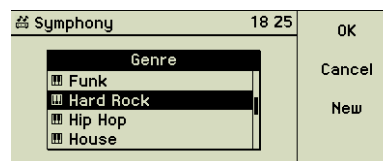
3.3 Meta data

Function key 1 mostly offers the option "Information" which gives you access to the meta data of a song, an album, or an artist.

These data originate from the internal database, the online "freeDB" music database, or by manual entries.

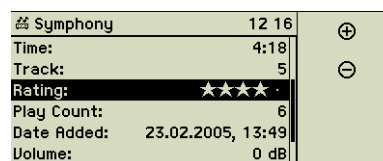
The song, artist, and album information can be changed by you at any time.

Changing a music genre can be done by selecting from the given list or you can add your own genres by pressing function key 3 "New".



The Track number represents the position of the song inside an album. You may adjust the playing sequence using this data.

Ranking: The function key 1 "+" increases the ranking one star at a time, while function key 2 "-" decreases it accordingly.



A Play Count shows how often the songs had been played already. Date and time of the import and the playing time is displayed and cannot be changed. The playback volume can be adjusted to correct output level differences of the songs. At last you see the type of encoding and the size of the audio file.

3.3.1 Editing meta data

Sometimes the internal database and the Internet database do not offer meta data for your songs. Then you may enter these details manually.

Please notice that the following procedure of entering text manually into the music center's database is not suitable for larger amounts of data. You may want to use the web interface on a Macintosh or Windows-PC. Details about connecting a music center to your computer are found in the next chapter 5 «Networking» on page 29.

Meta data of a single song

Use the Turn&Select wheel to navigate to the list of songs. Select a track showing the generic "Track 05" description. Press function key 2 "Information".

♫ Symphony	18:29	Import
01 Where the Rubber Meets The...		
02 I'd Lie For You		Information
03 Original Sin		
04 45 Seconds Of Ecstasy		Mark
Track 05		
Track 06		

You are looking at the generic meta data of "Track 05". The line containing the title is selected. Press function key 1 "Change" to enter the real title of this song.

♫ Symphony	18:29	Change
Title:	Track 05	
Artist:	Unknown	
Album:	Unknown	
Genre:	Unknown	
Time:	3:13	
Track:	5	

Use the inner disc of the Turn&Select wheel (11) to select a character from the alphabetic list at the bottom and choose it by turning the outer ring of the Turn&Select wheel (11) shortly to the right.

♫ Symphony	18:29	OK
Title		Cancel
Runnin For The Red Light		Delete
...nopqrs <u>t</u> uvwxyz...		Insert

Create the complete title using this technique. Function key 3 "Delete" and function key 4 "Insert" help correcting typos. When finished press function key 1 "OK" and you are back in the list of songs and the newly entered title is shown.

♫ Symphony	18:30	Import
01 Where the Rubber Meets The...		
02 I'd Lie For You		Information
03 Original Sin		
04 45 Seconds Of Ecstasy		Mark
05 Runnin For The Red Light		
Track 06		

Meta data of an album

Since the artist and the album title applies to all tracks, this meta data needs to be entered only once per album.

♫ Symphony	16:02	Import
Audio CD		
Artists		Copy
Albums		
Songs		Information
Genres		
Playlists		More...

Press function key 3 "Information" to see the meta data common to the album.

♫ Symphony	18:29	Change
Artist:	Unknown	
Album:	Unknown	
Genre:	Unknown	
Time:	1:05:43	

You may scroll down to the line Album, press function key 1 "Change" and enter the title of this album for all songs. Editing the other meta data is done the same way.

Meta data of one or more artists

Sometimes you want to assign the same genre to one ore more artists. Just select and mark one or more artists in the artist list and press function key 3 "Information".

3.4 Digitizing sounds of vinyl records and analog music tapes

We are sure during the years everybody had collected some very special items: music tapes compiled with love by a girl/boy friend, a real tape recording of a legendary family party, or the vinyl records no one cared to re-master on a CD. The music center can record and digitize all these memories for a safe digital future.

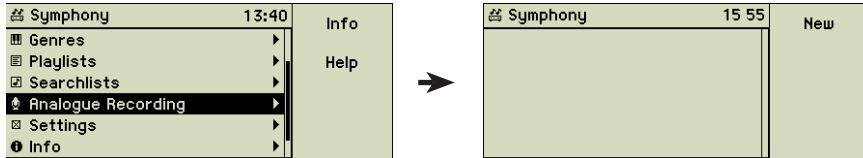
This kind of recording requires a lot of processing power of your music center. We recommend that you don't use its web interface or import folder during this process. Please make sure that the encoding of imported music CDs is complete.

3.4.1 Connecting an input device

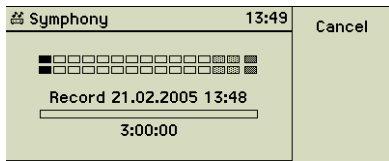
On the back of the music center you find an analog Audio In port (26) for tape decks, or similar components. Connecting a vintage turntable mostly needs an additional phono pre-amplifier. But usually all your components are connected to a central stereo amplifier, whose audio output signals (LINE OUT) are well suited for the music center.

3.4.2 Creating a new recording

Choose the main menu option Analogue Recording.



Press function key 1 “New” or the Record button (7) at the front of your music center to prepare for the recording.



The default name of the song, generated from the current date and time, is displayed. The available recording time is shown beneath. It depends on the free space of your music center. The more songs your music center already stores, the smaller becomes the free space for recordings. The maximum recording time is set to three hours. This equals to a file size of about 2 GB.

The music center stores your recording twice: First as an uncompressed AIFF file and after cutting the recording to single tracks, these songs as individual entries. These songs are finally imported into the music center's music library.

3.4.3 Adjusting the record level

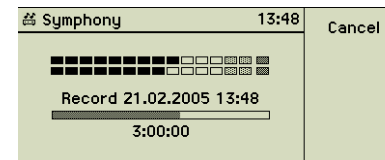
The level of the analog input is shown on the display. Use this to adjust the record level. Start your tape or other source and play some of the loudest parts of the music.

Auto adjust level

If your music center is set to “Auto adjust level” (see section 4.6 «Analog recording» on page 26 for details) play two or three songs to get a representative sample. After the recording has been started the recording level is changed only if overmodulations are detected.

Manual adjust

If you want to adjust the recording level manually, watch the level display closely. Use the inner wheel of the Turn&Select wheel (11) to adjust the level. The loudest parts of the music should bring the peak level display to its maximum without getting to the rightmost, blackrimmed element. Your selected record level is displayed by the lower row, while the upper row shows the current input level using your current record level settings.

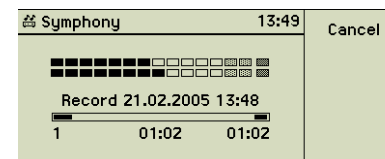


Manual adjusted record levels are never changed by the music center, even if this yields to an overmodulation of the recording.

You may now stop the playback of your music source.

3.4.4 Start the recording

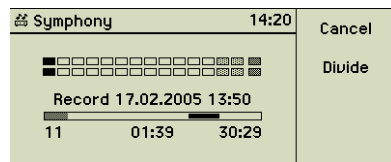
When all adjustments are done rewind your tape to the start and press the Play button (5) of the music center.



Below the progress bar three values are displayed:

- left: number of the track
- centered: duration of the currently recorded track
- right: total duration of the recording

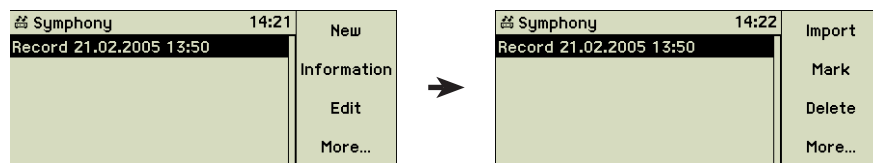
If “Auto dividing” is switched off, function key 2 “Divide” is enabled. Pressing this function key during the recording process separates individual tracks.



The recording is stopped automatically when the maximum recording time is expired. You may end it manually by pressing the Stop button (4).

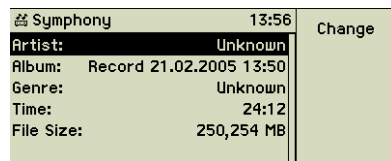
3.4.5 Editing the recorded file

The main menu option Analogue Recording now shows your recording. Now you may add meta data, edit, delete, or import it.

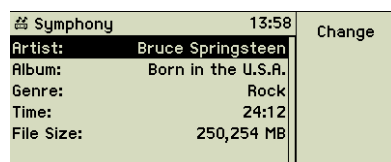


Editing meta data

Press function key 2 “Info” to display the meta data of the recorded file.

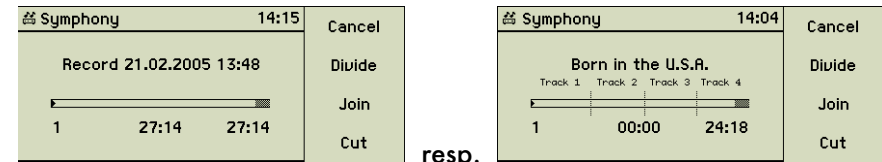


You may edit Artist, Album, or Genre. These meta data are inherited by the single tracks after dividing this file. Time and File Size can not be modified. General information on editing meta data can be found in section 3.3.1 «Editing meta data» on page 15.



Editing gaps

Press function key 2 “Edit” to prepare your recorded file for the import. The display shows a representation of the file:



The bar shows a section of about 15 minutes of the recording. Depending on the position of the cursor the remaining parts are displayed as grey-hatched elements at the left resp. right end of the bar.

Setting gaps

If you did not set gaps during the recording, the track counter still shows “1”. Press the Play button (5) on the front of the music center to start the playback of the recording. Listen to the music to find the end of the current track. You may turn the inner wheel of the Turn&Select wheel (11) to move faster forward. Watch the time information and compare it to the data on the record cover or the cassette inlay. When you reached the right place in time, press the function key 2 “Divide” to set a gap. This gap is displayed immediately as a vertical bar and the duration of the next track is reset to zero. Proceed until you reach the end of the recording.

Tip: If you define a long time of silence as a separate track, you can delete this afterwards very easily.

Navigate in the recorded file

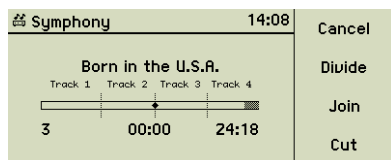
A short turn of the outer wheel of the Turn&Select wheel (11) or pressing the Previous Track (3) / Next Track (6) buttons shortly, moves the cursor to the next resp. previous gap.

Turning the inner wheel of the Turn&Select wheel (11) or pressing the Previous Track (3) / Next Track (6) buttons for a longer period, moves the cursor inside the track forth resp. back.

Delete a gap

If you set a gap at the wrong place, you can delete it by joining the two adjacent tracks.

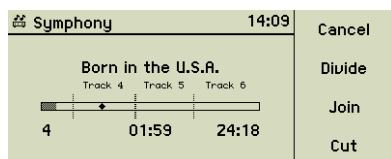
If the cursor is exactly on a gap, pressing the function key 3 “Join” joins the tracks to the left and right of this gap.



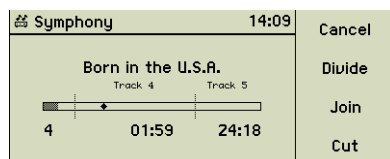
F3



If the cursor is inside a track, pressing the function key 3 “Join” joins the current track with its direct successor.

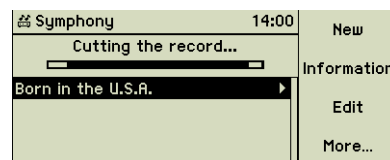
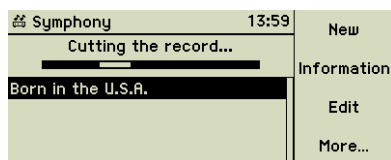


F3

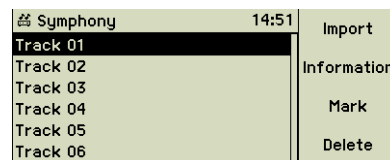


Cutting the recorded file

When all gaps are in place you can cut the recorded file into its tracks by pressing the function key 4 “Cut”. The process is visualized on the display.



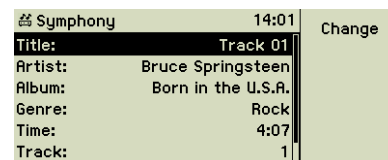
To the right of the title of the recording appears a triangle, indicating that additional information is available. Turn the outer wheel of the Turn&Select wheel (11) to the right to move to this level.



Unwelcome tracks, like the before mentioned silence, may now be deleted from the list (function key 4 “Delete”).

Editing meta data of tracks

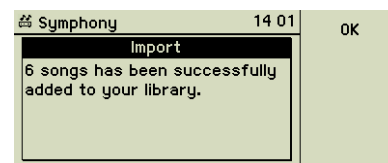
Choose the track you want to edit and press the function key 2 “Information”.



The meta data is displayed showing Artist, Album, and Genre according to your entries for the recorded file. You may now edit the Title information of this track. General information on editing meta data can be found in section 3.3.1 «Editing meta data» on page 15.

3.4.6 Importing the tracks

Finally all preparing tasks had been done and the tracks can be imported into the music center’s music library. Press the Record button (7) or the function key 1 “Import” to import all tracks. If you do not want to import all displayed tracks, select the ones you like and then press the Record button (7). When the import is done, the display shows the final message.



During the import the tracks are converted to the format given in the settings, see section 4.5 «Import from CD» on page 25 on this topic.

If you want to transfer the music to MP3 player or plan to hear it via Multi-room Streaming the encoding must be set to a format these devices are able to process.

If you do not cut or rename the recorded file it is imported with the Album and Title name composed from the current date and time, i.e. “Record 25.04.2005 11:34”

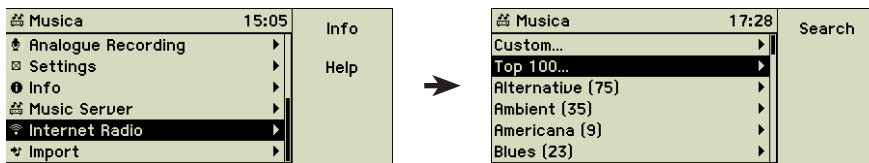
The original recording file remains inside the “Record” folder of your music center as long as it is not deleted manually. You may copy it to a connected computer and save it on disk or CD-R before deleting it to reuse the space.

3.5 Internet Radio

If you plan to use this feature we recommend that you have an Internet access tariff based on a flat rate. Otherwise the figures on the Internet provider's invoice may slightly reduce the pleasure. An example: 1000 MByte transferred data equals to about 17 hours of Internet radio listening.

Please note that the streaming process of Internet radio usually needs some open outgoing ports in the range of 8000 to 8005, but other ones are possible, too. If your music center is connected to the Internet through a firewall, you may have to open the necessary ports additionally. The web pages of the Internet radio stations should provide these information.

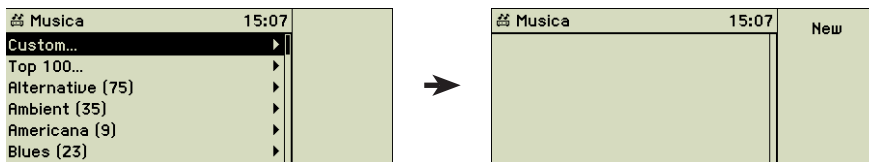
If your music center is connected to the Internet selecting "Internet Radio" from the main menu opens an additional world of unlimited music.



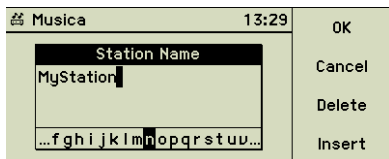
A long list of about 2,000 predefined stations is available from the start. It is partitioned into your own stations, the Top 100, and a lot of genres.

3.5.1 Custom...

You may create your own personal list of radio stations selecting the menu option "Custom...".



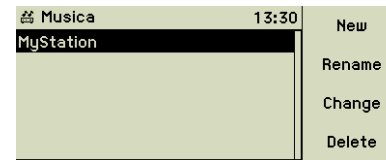
Press the function key 1 "New" and enter the name of your first radio station.



Press the function key 1 "OK" and enter the URL of this station.



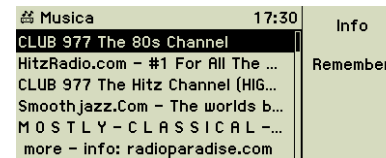
Press the function key 1 "OK" and your first radio station is defined.



Tip: Your music center supports two kinds of URLs (web addresses). Direct URLs which allow to download the MP3 files immediately after the connection has been established and URLs with suffixes like .pls oder .m3u accessing playlists. The second type provides a list of music servers, which are tried one after another until a connection can be established. All music servers of such a list refer to the same radio station.

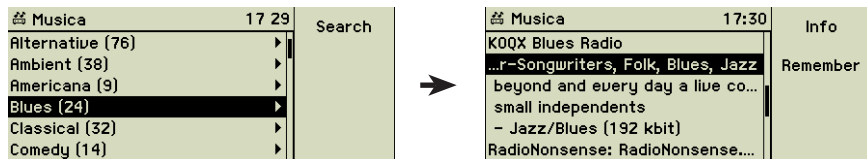
3.5.2 Top 100...

This option uses the Shoutcast server which lists the 100 most popular Internet radio stations. Obviously this list is not static but changes over time.



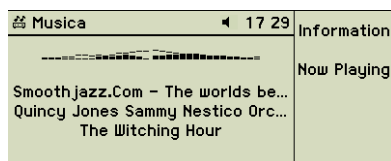
3.5.3 Predefined stations

Initially these lists are empty. Please choose the genre you want to hear and press the function key 1 "Search" or turn the outer ring of the Turn&Select wheel to the right. Your music center now looks for the appropriate stations and fills the list.



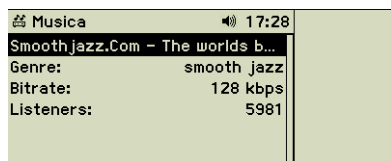
3.5.4 Receiving a radio broadcast

Choose the entry you like and press the Play/Pause button (5).



To change to the next station of the list, press the Next Track (6) button on the front panel or the remote control.

The function key 1 "Information" provides you with information about the genre or the number of listeners.



The function key 2 "Now Playing" provides you with the name of the radio station your are currently listening to.

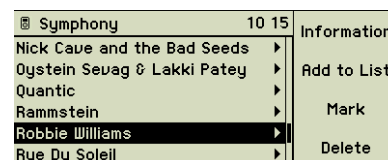
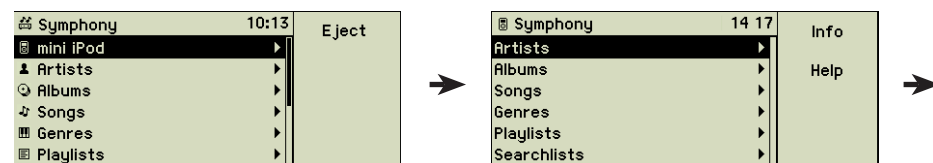


The function key 2 "Remember" transfers the current station to your personal station list. That is the easiest way to compile your favourites and you are independent of other, maybe changing, lists.

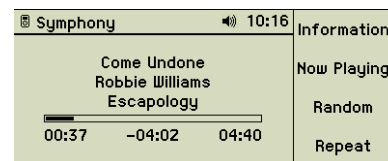
3.6 Connecting an MP3 player

The USB ports (22) on the back of your music center can be used for connecting an MP3 player. Then you can play the songs of the MP3 player via the music center and may edit meta data and playlists.

After an MP3 player is plugged into the music center it is handled like a music CD and appears with its own name as a new entry in the main menu. Behind the menu option of the MP3 player you find a complete menu containing Songs, Artists, Albums, Genres, and Playlists of the external device. Navigating this menu does not present you with any surprise, it is all the same as you are used to.



Every time the menus of the MP3 player are selected, the name of the external device appears as header on the display. Despite the identical menu naming, looking at the header gives you the exact information, what music collection your are dealing with at the moment.



Copying songs to an MP3 player

Choose the songs you want to copy using the music center's main menu options Artists, Albums, or Songs. The menu option "Mark" may help in selecting more than one item of a list. Then press function key 2 "Add to List" and the list of playlists is displayed.

Symphony	10:21	Add to List
Party		
Relax		Mark
mini iPod		New
		Delete

In addition to your own playlists the name of the MP3 player itself is displayed as a “playlist” here. Select this special playlist and press function key 1 “Add to List” to transfer the songs to the external player.

Eject your MP3 player



You must press the function key 2 “Eject” on the music center, before unplugging the device! Otherwise data loss on your MP3 player or the music center may occur.

3.7 Backup your music collection

While the music center is manufactured to outstanding quality it is a man-made device and no one can guarantee an error-free operating all the time. To prepare for a worst-case scenario we highly recommend backing up the imported data to an external device.

Connect an external Olive hard disk to one of the USB ports (22) on the back of the music center and save all or a selection of your songs to this backup device. The external Olive hard disk needs no external power supply, but must be switched on using its switch on the back.

Symphony	15 09	Info
Backup Disk		
Artists		Backup
Albums		
Songs		Restore
Genres		
Playlists		Eject

The Olive hard disk is shown in the main menu as Backup Disk and you got the options Info, Backup, Restore, and Eject. Pressing the function key 1 “Info” gives you detailed information about your backup disk.

Symphony	15 13	
Last Backup:	Never	
Disc size:	80 GB	
Albums:	0	
Artists:	0	
Songs:	0	

Backup

Choose Backup to copy all songs and its meta data to the backup disk. Overwriting of existing songs must be confirmed.

During the backup all function keys are locked. No music CDs can be imported and the analog recording is disabled. You may playback tracks and listen to the music. A complete backup of a music center disk may last about five to six hours.

Symphony	15:11	
Saving song library...		
Backup Disk		
Artists		
Albums		
Songs		

When the backup process is completed you can check the amount of transferred data by pressing the function key 1 “Info”.

Symphony	15 11	
Last Backup:	2005.03.30 14:15	
Disc size:	80 GB	
Free space:	29%	
Albums:	63	
Artists:	40	
Songs:	665	

Restore

Use the option Restore to transfer data back from the backup disk to the music center. During the restore process all other functions are disabled and it may last about the same time as the backup process.

Restoring 52.2 GB ...	Cancel
-----------------------	--------

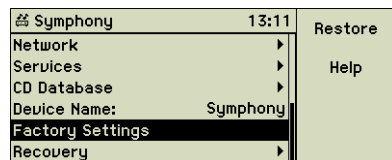
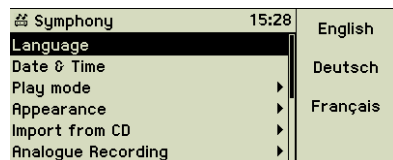
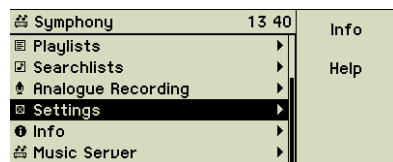
Disconnecting the backup disk



You must press the function key 4 “Eject” on the music center, before unplugging the backup disk!

4 SETTINGS

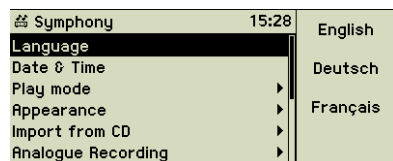
This main menu option provides you with numerous settings to adapt the music center to your needs and tastes.



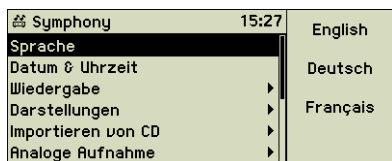
Besides the general settings of the display language, date and time, and the name of your music center, there are options how the music center reacts on inserting a CD or how to playback songs, and the most detailed parameters for the network setup.

4.1 Language

You may choose the display language here. Press the appropriate function key. The display changes immediately.



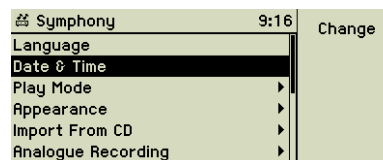
F2



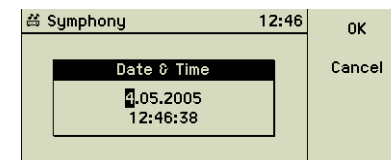
4.2 Date & Time

You can adjust the internal time and date of your music center here. This may be necessary for Daylight Saving Time or if your music center has been unplugged for a longer time.

Use the inner wheel of the Turn&Select wheel for setting the digits, a quick right turn of the outer ring moves the cursor to the next field.

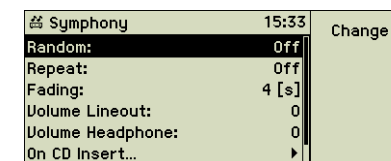
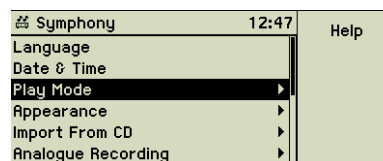




F1



4.3 Play mode

Options for the behaviour of the music center while playing songs.

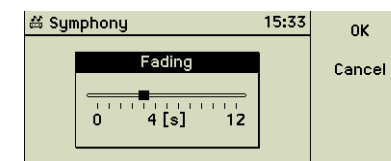
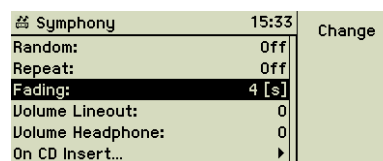


In random mode () songs of the selected artist, the selected album, or another selection are played in random order. In repeat mode () the music center begins again with the first title of the current selection after the last title has been played.

Fading maintains an interval of 0 to 12 seconds in which the ending song is faded out and the next song's volume is turned up again.

The volume of the Line-out port (25) can be adjusted to match the needs of your stereo amplifier.

The music center can automatically start the playback when a CD is inserted. Otherwise you have to press the Play button (5).



♫ Symphony	14:14	Change
Play Songs:	Off	

4.3.1 Dynamics compression

Dynamics compression adjust the volume of the played music dynamically: It limits the output level during playback to a preset value. This setting can be enabled or disabled for all tracks of the music library centrally. It is most often used in public areas, like restaurants, hotels, etc., to accomodate the guests.

These options allow you to define how your music center should handle the output level during playback.

♫ Musica	12:54	
Repeat:	Off	
Fading:	4 [s]	
Volume Lineout:	0	
Volume Headphone:	0	
On CD Insert...		
Dynamics Compression		

→

♫ Musica	13:32	Off
Compression:	Off	Night Mode
		Loud
		Environme...
		Expert Mode

Off: The function key 1 "Off" switches dynamics compression off completely.

Night Mode or Loud Environment

Two predefined modes of dynamics compression can be easily activated by pressing function key 2 "Night Mode" or function key 3 "Loud Environment".

Night Mode is recommended for quiet environments like listening music in your apartment showing consideration for the sleep of your neighbours. In contrary Loud Environment may be used in places with lots of environmental noise.

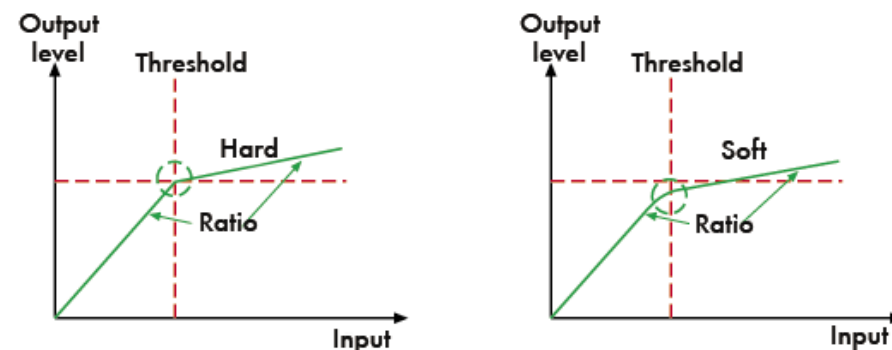
♫ Musica	13:32	Off
Compression:	Night Mode	Night Mode
		Loud
		Environme...
		Expert Mode

Expert mode

The function key 4 "Expert Mode" allows experts to set the parameters of dynamics compression.

♫ Musica	13:33	Off
Compression:	Expert Mode	Night Mode
Method:	Hard Knee	Loud
Threshold:	-20 dB	Environme...
Ratio:	1.0	Expert Mode
Attack:	5 ms	
Release:	0.3 [s]	

The dynamics compressor limits the range of dynamics of the audio material. When the defined threshold level is reached, the compressor compresses the signal according to a certain ratio. Attack time and release time define how fast the compression begins and ends.



Activation method: This method defines how the transition between compression and non-compression should be done. Soft Knee is recommended for instrumental sound, Hard Knee for voices, suppressing "pop" sounds in talking and singing.

♫ Musica	13:33	Hard Knee
Compression:	Expert Mode	Soft Knee
Method:	Hard Knee	
Threshold:	-20 dB	
Ratio:	1.0	
Attack:	5 ms	
Release:	0.3 [s]	

Threshold: This is the level when the compression will be applied.

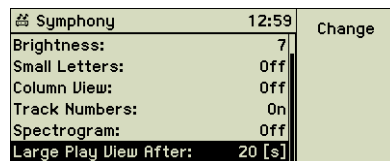
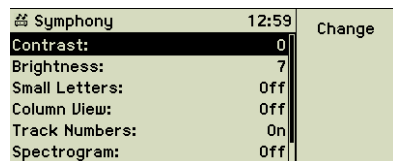
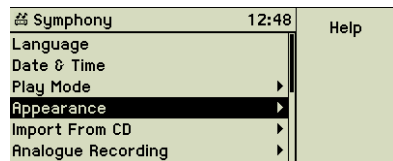
Ratio: This defines the magnitude of the compression, the relation between input and output level. A ratio of 4:1 means, that an increase of 100% of the input level beyond the threshold leads only to an increase of 25% of the output level.

Attack: This sets the interval the compressor waits until it reacts. This interval should be not too short, to avoid kind of pumping effects.

Release: This sets the interval the compressor should go on after the input level fell below the threshold. Turning the control to the right gives you smoother transitions, turning to the left has the contrary effect.

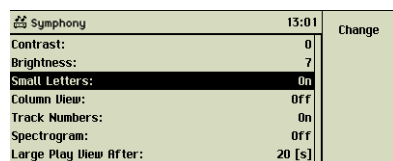
4.4 Appearance

This menu controls the way the music center shows items on the display.

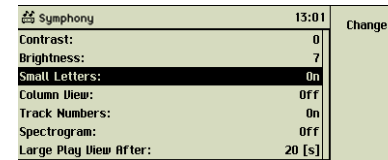


Contrast of the display and Brightness of the control buttons enhance the readability of the display depending on the lighting environment. You can control the brightness of the display, too.

Small Letters let you see more letters per line. Especially when you are used to the column display, this helps a lot. Also long song titles or elaborated names of artists can be seen completely using this layout option.



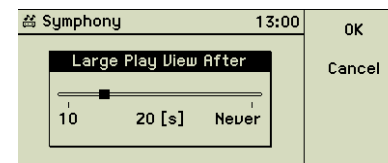
The column layout of the menu tree is a matter of orientation. The way back to the main menu is obvious and during the first days this option may help the beginner.



The option Track Numbers let you configure the display below the progress bar. Remaining play time, current track, number of the tracks of the playlist or alternatively remaining play time, total playing time, and elapsed time of the current track.

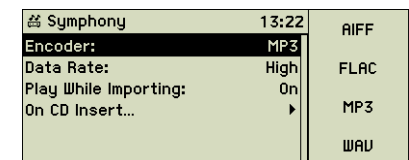
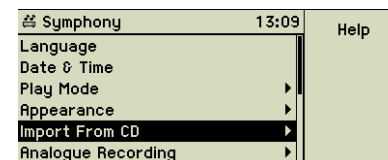
The Spectrogram option toggles the display of banded frequency levels during the playback of songs.

Entering a time interval into Large Play View After switches the display to a larger play view after the given interval. That helps recognizing title and artist name while sitting on a distant but comfortable couch.



4.5 Import from CD

Here are the settings concerning the import of music CDs.



An important topic is the internal format, which the imported song should be encoded to. The type of encoding defines quality, size of the stored data and compatibility in various respects. The Internet and lots of books are covering this issue. The music center uses the format "MP3" by default and if you are not really sure what you are doing, leave it this way.

By default Data Rate is set to "High", an equivalent to 160 kbit/s. "Higher" means 192 kbit/s, "Good" is 128 kbit/s, and "CD Quality" is 320 kbit/s. Higher quality always means that each song needs more room of the internal music center storage. Additionally, the MP3 format files can be encoded using Variable Bite Rate (VBR).

♫ Symphony	13:27	Good
Encoder:	MP3	
Data Rate:	High	High
Play While Importing:	On	Higher
On CD Insert...	▶	UBR Coding

If you chose VBR, you can set the quality of this encoding.

♫ Symphony	13:27	Good
Encoder:	MP3	
Data Rate:	UBR Coding	High
UBR Quality:	3	Higher
Play While Importing:	On	UBR Coding
On CD Insert...	▶	

The following table shows how many music CDs can be stored on your music center, depending on the encoding used for the files. An average music CD contains 635 MB and the available space of your music center system is calculated from the capacity of the internal hard disk minus 3 GB needed for the system files and the database.

Encoding	Quality	Symphony	Musica
RAW (AIFF/WAV)	no compression	115	235
MP3	good - 128 kbit/s	1,280	2,615
	high - 160 kbit/s	1,025	2,090
	higher - 192 kbit/s	850	1,705
	CD Quality - 320 kbit/s	510	1,045
FLAC (Free Lossless Audio Codec)	lossless compression	195	395

Additionally, you can let the music center play the music CD while importing it and decide what should happen on inserting a music CD.

♫ Symphony	14:16	Change
Import Songs:	On	
Eject After Import:	Off	

It is possible to start automatically an import on a CD insert. Furthermore the CD can be ejected automatically after the import is complete. These options help a lot, when you are planning to archive many CDs of your collection in sequence.

4.6 Analog recording

This menu option stores the settings your music center applies during recording music from the analog sources, like turntable, tape deck, etc.

♫ Symphony	13 10	Help
Date & Time		
Play Mode	▶	
Appearance	▶	
Import From CD	▶	
Analogue Recording	▶	
Burning	▶	

♫ Symphony	16:09	Change
Auto Dividing:	On	
Gap Between Tracks:	2.0 [s]	
Auto Adjust Level:	On	
Recognition Method:	Music	

Gaps between tracks could be set automatically by the music center, when it detects a silent period. The option Gap Between Tracks lets you define the duration of silence that qualifies as a gap.

♫ Symphony	16:09	OK
Gap Between Tracks		Cancel
0.5	2.0 [s]	5.0

This automatism is very reliable and useful when recording records or tapes of popular music, which songs usually have very distinctive starts and ends. Classical music, live recordings and spoken text may not fit as easily. You may switch off this function then.

All automatically set gaps may be edited, deleted or newly set after the first phase of the recording is done. When all gaps are at the right places, you start the second and final phase of importing the tracks to the music center music library.

Auto Adjust Level set to On lets your music center do the leveling automatically. This is mostly sufficient and saves a lot of work. If you are to record spoken text the Recognition Method should set to Speech.

♫ Symphony	16:09	Music
Auto Dividing:	On	
Gap Between Tracks:	2.0 [s]	Speech
Auto Adjust Level:	On	
Recognition Method:	Music	

4.7 Burning

Here are the settings concerning the burning of music CDs.

♫ Symphony	13:10	Help
Appearance		
Import From CD		
Analogue Recording		
Burning		
Network		
Services		

→

♫ Symphony	15:39	Audio CD
Disc Format:	Audio CD	
Speed:	Secure	
Gap Between Songs:	0 [s]	

The music center burns music CDs only.

♫ Symphony	13:05	Secure
Disc Format:	Audio CD	
Speed:	Secure	Fast
Gap Between Songs:	0 [s]	

The Speed option lets you choose between a safer or faster burning. The setting Secure leads to 8x speed, the setting Fast burns up to 24x speed. This depends on the quality of the used CD material.

♫ Symphony	15:39	OK
Gap Between Songs		Cancel
<div> <div></div> <div>0</div> <div>2 [s]</div> <div>4</div> </div>		

You can define the length of the gaps between songs in seconds.

4.8 Network

These settings define the music center's properties for integrating with other computers in a local area network, wired and wireless.

♫ Symphony	13:10	Info
Appearance		
Import From CD		Activate
Analogue Recording		
Burning		Help
Network		
Services		

→

♫ Symphony	14:17	Symphony Network
Mode:	Symphony Network	
WLAN:	On	Home Network
Network Name:		Expert Mode
Key:	****	
Channel:	1	

You can choose from three modes: "Symphony/Musica Network" is described in the first section of the chapter «Networking», "Home Network" shows up in the second section. "Expert Mode" and the details of the other modes are discussed in the next chapter «Advanced Networking». The music center can be connected with 10/100BaseT cabling as well as wireless.

4.9 Services

Here you can enable and disable the server mode of your music center. Depending on the technology used by your satellites one of these modes must be enabled.

♫ Symphony	13:10	
Burning		
Network		
Services		
CD Database		
Device Name:	Symphony	
Factory Settings		

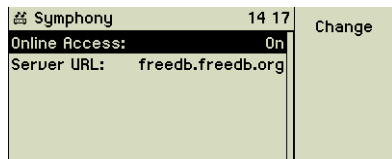
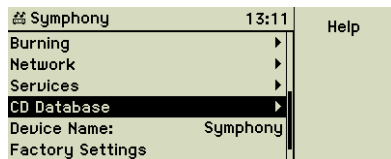
→

♫ Symphony	13:14	Change
UPnP/AV:	On	
iTunes (DAAP):	On	

Sometimes it may be necessary to switch off both modes to protect the UPnP/AV resp. DAAP server from unauthorised access.

4.10 CD database

The music center maintains a large internal music database of about 2 million titles. Almost every music CD you insert, is recognised and the meta data, the names of the tracks, the artist, and the CD title is displayed immediately. If the music center is connected to the Internet it can look into the online database, too.

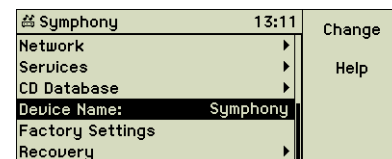
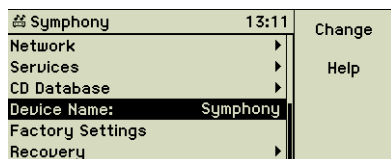


The setting for Online Access enables or disables this feature. The URL of the Internet database can be changed here, if some time in the future the server provider decides to change the web address. The freeDB access uses HTTP port 80.

If the online access to the freeDB database fails, the music center automatically uses its integrated database for retrieving meta data.

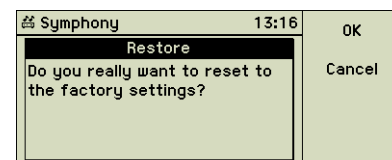
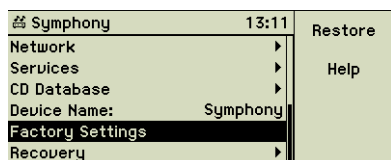
4.11 Device name

Change the name of your music center here.



4.12 Factory settings

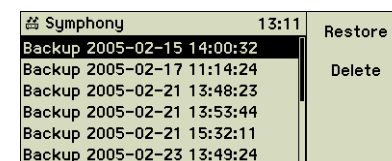
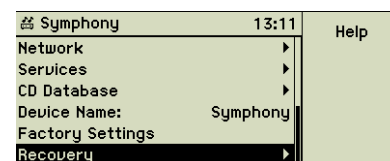
Using this menu option you can restore all settings back to their default values.



This affects ALL parameters of the Settings menu. Your imported music and their meta data is not endangered at all - all songs will still be available after executing this command.

4.13 Recovery

The internal database containing the meta data of all stored tracks is duplicated on every startup of the system. The option Recovery shows a list of the 20 recent backup files.



If your meta data gets corrupted you can restore it from these files. Choose the desired version and press the function key 1 "Set". Since this may delete information you entered after the creation of the backup file, you have to confirm this action by pressing function 1 "Restore" again.

Use function key 2 "Delete" to remove backup files you do not need.



If a backup file shows a future date, we recommend to delete this file. The music center looks at the latest date of a backup file and starts a new backup only if the music center internal current date is later.

5 NETWORKING

Your music center is great for archiving and listening to music. But as a member of a network of additional music centers, satellites and your home computers it shines even more.

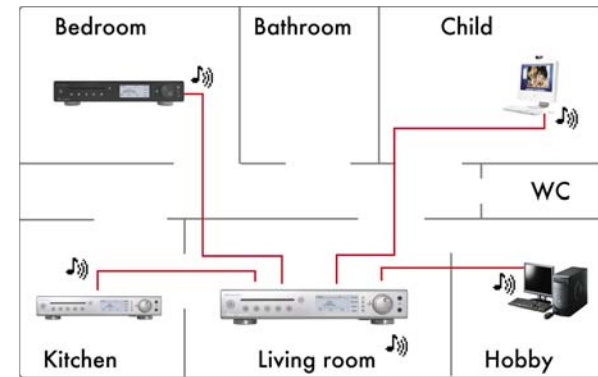
You may

- play songs from the music center on your computer,
- play songs from your computer on the music center,
- control the music center with a web browser,
- transfer songs from your computer to the the music center,
- listen to Internet radio broadcasts with the music center,
- use the online music database as additional source of information if you have Internet access.

Your music center can communicate with other devices in many ways. The factory set mode defines your music center as the main device and is called "Symphony/Musica Network". Using this mode the music center is responsible for the communication and the other devices "ask" it for the necessary information. The alternate mode is called "Home Network" configuring the music center as part of an existing local computer network. Another computer or router must be available which administrates the network. The music center checks with this device and receives the necessary data from it.

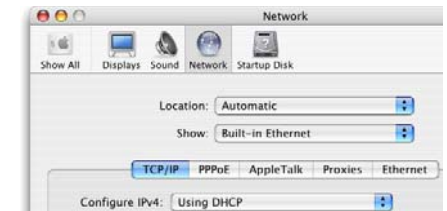
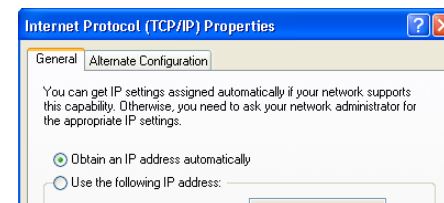
5.1 The center of your music

Would you like to listen to your music collection at other locations? Not only in your living room, but in your home office, in the basement or the sleeping room? Technical buzz words like "computer network", "LAN", and "router" don't tell you anything? Sometimes you are using a stand alone Macintosh or Windows PC? No problem, the Olive music center can access, and connect, all your digital music in your home.



Each music center is preset for this situation and enabled for wireless communication with your devices. Additional networking by cable is also available. On the back the music center provides four jacks (21) made for normal computer network cables. Switch on your music center first and then the other devices. They will detect the music center and adjust to it automatically. After this first mutual communication, all devices got their information and you may use them in arbitrary sequence.

The network settings of Windows PCs and Macintosh must be set to "Obtain an IP address automatically" resp. "DHCP". This is especially important if you are using a portable computer alternately at home and at the office and its networking settings are configured for your office.

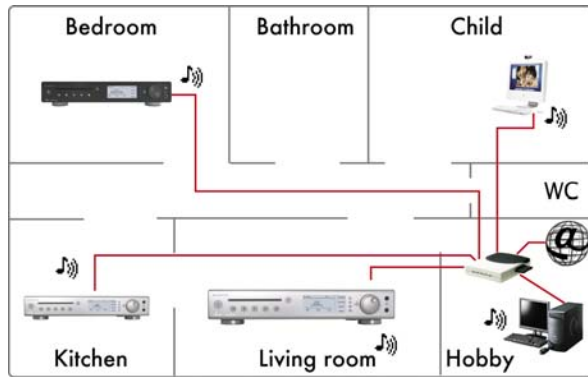


This enables the music center to act as the main device and to provide network information to your other components.

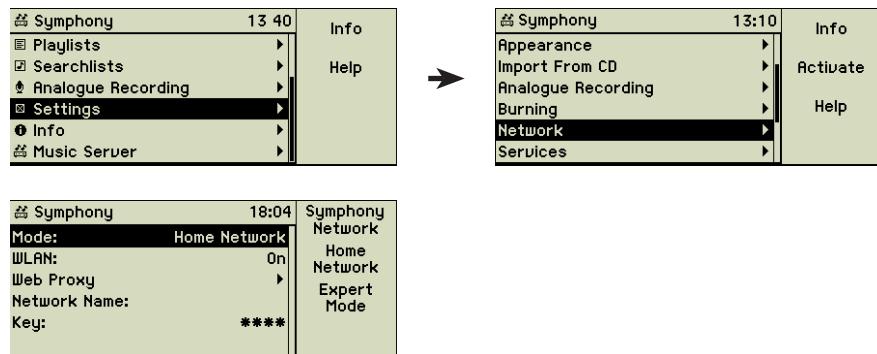
More information about the music center's networking capabilities can be found in chapter 7 «Advanced Networking» on page 34.

5.2 A member of your home network

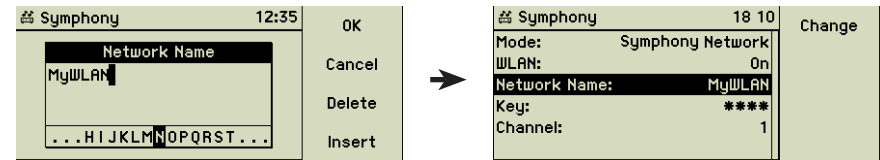
If you already use a computer network your music center can smoothly integrate into it. This can be done conventional by Ethernet cables or wireless (WLAN).



Use the menu option Settings to change the music center's behaviour to "Home Network". Then it will recognise the existing devices and retrieve the necessary address information from your network managing component.



The antenna (23) for wireless communication (WLAN) is on the back of the music center, the plugs (21) for Ethernet cabling beneath. As soon as the music center is connected to your local network everything is done. If you are using wireless communication the name of your WLAN and sometimes a password have to be given. Enter it manually or one of the available networks.



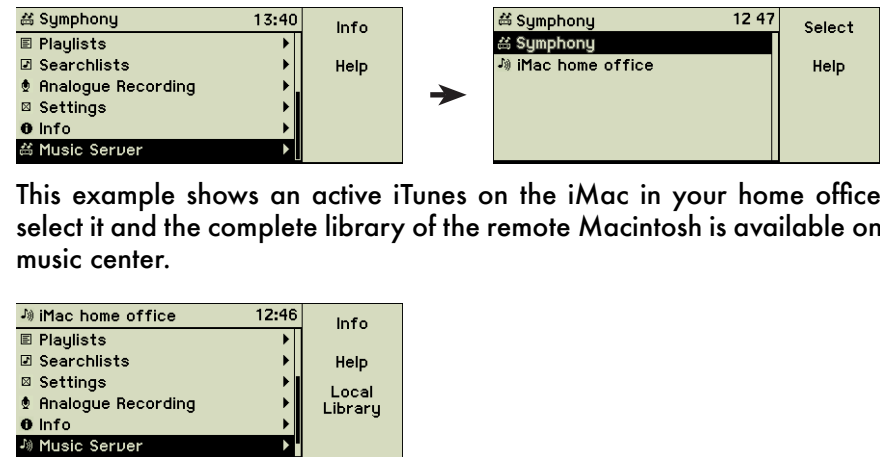
Please check the spelling of both entries. If one does not match the music center is unable to log in to the network.

More information about the music center's networking capabilities can be found in chapter 7 «Advanced Networking» on page 34.

5.3 Your music center and iTunes

You may utilise connections between the music center and PCs in both directions. The music center can play songs stored in iTunes libraries on Macintosh or Windows PCs and the iTunes software can play the songs of your music center. Obviously their music collections must be published to be seen here.

Available additional music sources are displayed on the music center under the main menu option Music Server.

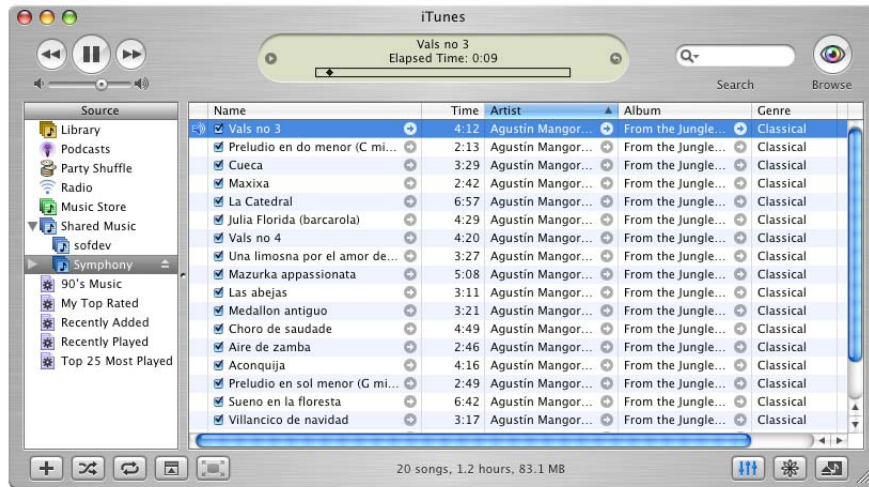


This example shows an active iTunes on the iMac in your home office. Just select it and the complete library of the remote Macintosh is available on your music center.

You may notice that the header has changed from "Symphony" to the name of the remote music server. This emphasises the fact that the music center now acts only on the remote library. All songs, playlists and settings of the iTunes library are active and the music center temporarily forgot all about its own library. Pressing the function key 3 "Local Library" brings this back and pushes the remote songs away.

Now the other way round:

Look at your iTunes window. The music center appeared with its name in the list of libraries. Even your playlists are available.



You may use the iTunes features to play and access the songs of your music center. But the songs always remain stored on the music center - if you want to access them, the music center must be turned on.

Apple's software "iTunes" is available for download at www.itunes.com.

5.4 Your music center and UPnP/AV satellites

Besides connecting to other music center's or iTunes server the music center can communicate with any UPnP/AV satellites. These are devices which fetch music from a server in a streaming mode. For optimum performance use Olive's own music satellite, the Sonata. More details about the Sonata are available at www.olive.us

The communication between satellites and server is organised by the UPnP/AV protocol. The satellites are UPnP/AV clients, the music center is the UPnP/AV server.

The UPnP/AV server inside the music center is based on the technology of TwonkyVision GmbH (www.twonkyvision.com). All satellites compatible with a TwonkyVision UPnP/AV server can be used as clients.

The music center and the clients can be connected by standard cabling or by a wireless network. The network settings must be ok and the UPnP/AV service must be enabled (see section 4.9 «Services» on page 27).

6 USING A WEB BROWSER FOR MANAGING YOUR MUSIC CENTER

This chapter shows ways to manage data content of the music center using a web browser instead of operating the Turn&Select wheel on its front. For this purpose the music center must be connected to a computer network and set up correctly. Please refer to the last chapter on integrating a music center with other devices.

1. Launch the web browser of your choice.
 2. As URL (address) enter the IP address of your music center.
- The music center displays this address in "Settings" > "Network" > "Info".

If the music center is configured as "Symphony/Musica Network" you may enter the IP address "192.168.1.1".

The home page of the music center appears. At the top you find the control buttons already familiar from the music center main menu options. The Home button in the top-left corner always brings you back to this page.



Editing artist's data

When you click the "Artists" button the list of stored artists is displayed. The small icons attached give you the option of Editing (✎) or Deleting (🗑) the entry. After clicking the "Editing" button the input fields for name and genre appear on the right side of the window.



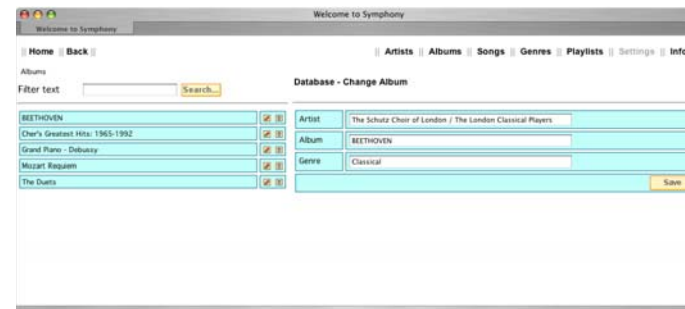
Clicking the "Save" button confirms your changes.

The input field Filter Text and the button Search can be used for reducing the number of displayed items.

You may click the name of an artist to reveal a list of his/her albums.

Editing album data

When you click the "Albums" button the list of stored albums is displayed. The small icons attached give you the option of Editing (✎) or Deleting (🗑) the entry. After clicking the "Editing" button input fields for artist, name, and genre appear on the right side of the window.



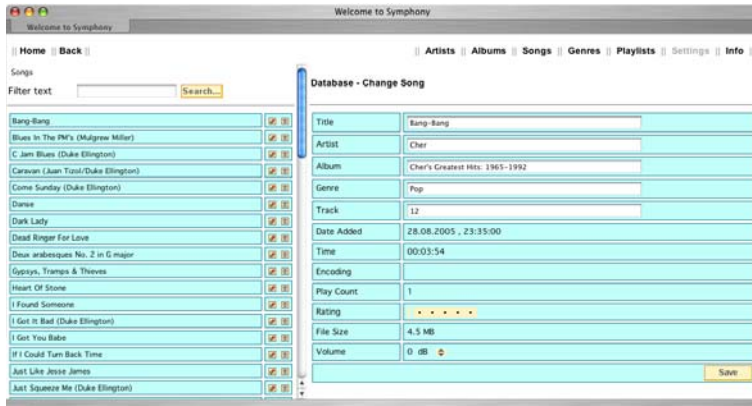
Clicking the "Save" button confirms your changes.

The input field Filter Text and the button Search can be used for reducing the number of displayed items.

You may click the name of an album to reveal a list of its songs.

Editing song meta data

When you click the “Songs” button the list of stored songs is displayed. The small icons attached give you the option of Editing (✎) or Deleting (🗑) the entry. After clicking the “Editing” button the meta data fields appear on the right side of the window.

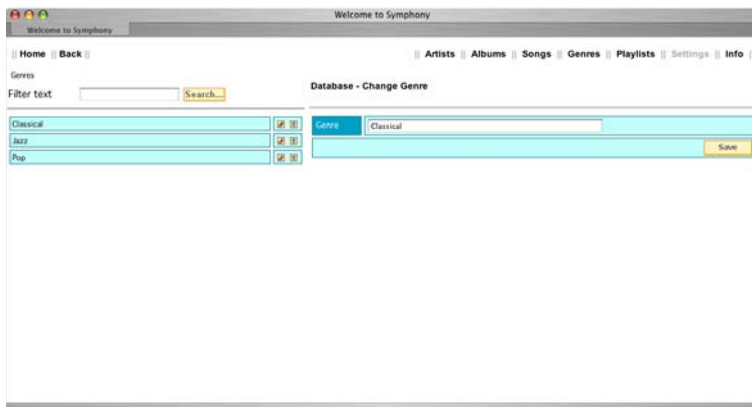


Enter or change text data by typing into the fields. Changing the Ranking can be accomplished by clicking the displayed stars or their place-markers. The Volume can be adjusted using the up and down arrows.

Clicking the “Save” button confirms your changes.

Editing a genre’s data

When you click the “Genres” button the list of stored genres is displayed. The small icons attached give you the option of Editing (✎) or Deleting (🗑) the entry. After clicking the “Editing” button an input field for the name appears on the right side of the window.

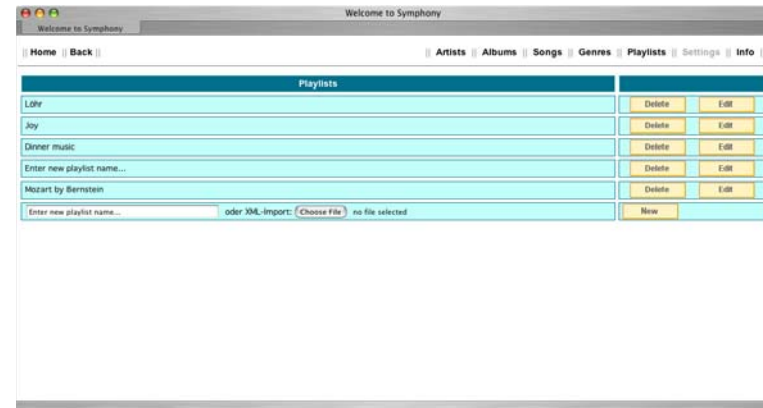


Clicking the “Save” button confirms your changes.

The input field Filter Text and the button Search can be used for reducing the number of displayed items.

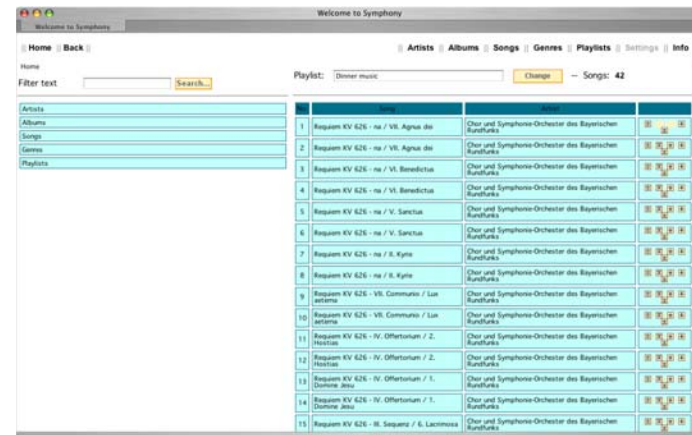
Editing playlists

When you click the “Playlists” button the list of stored playlists is displayed.



You may click the name of playlist to reveal its contents.

Using the small buttons to the right of a song title it can be moved up, down, to the top, or to the bottom of the list, or completely removed from it.



To the left buttons labelled Artists, Albums, Songs, Genres, and Playlists are shown. Use these buttons to add additional items to the displayed playlist.

The input field Filter Text and the button Search can be used for reducing the number of displayed items.

Info

This button shows you a short overview about the contents of your music center.

Hiddeho Information	
Device Name	Olive 2
Version	2.1
IP Address	192.168.1.109
Songs	65
Artists	5
Albums	5
Genres	3
Playlists	1
Disc size	80 GB (99.4 % free space)

7 ADVANCED NETWORKING

In addition to its primary use as your music centre, the device can be integrated into your local computer network or can be the starting point of one. This chapter discusses the configuration options for networking. It requires some basic understanding on IP networking.

7.1 Ports

The music center provides four 10/100BaseT Ethernet ports (21) on its backside, which are configured as a general switch. The ports automatically adapt to the used bandwidth and cabling. Looking for cross-over cables is not necessary.

The music center can be used as a WLAN station according to 802.11g (54 Mbit/s). This standard is backwards compatible with 802.11b (11 Mbit/s). The necessary antenna (23) is also located on the back of the music center. Depending on the mode the music center is configured to it is acting as a WLAN client or an Access Point.

7.2 Network modes

The music center allows you to choose from these three operating modes:

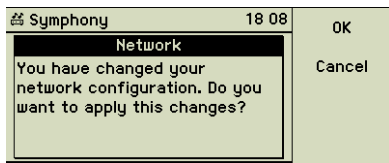
- **Symphony/Musica Network:** The music center acts as central switch, optional WLAN Access Point, and DHCP server of the network.
- **Home Network:** A working local area network already exists and the music center can be integrated as DHCP client and optional as WLAN client into it.
- **Expert Mode:** A working local area network already exists and the music center can be integrated by manual IP configuration and optional as WLAN client into it.

⌂ Symphony	14:17	Symphony Network
Mode:	Symphony Network	Home Network
WLAN:	On	Expert Mode
Network Name:		
Key:	****	
Channel:	1	

⌂ Symphony	18:04	Symphony Network
Mode:	Home Network	Home Network
WLAN:	On	Expert Mode
Web Proxy	▶	
Network Name:		
Key:	****	

⌂ Symphony	18:04	Symphony Network
Mode:	Expert Mode	Home Network
WLAN:	On	Expert Mode
Network Connection:	Ethernet	
IP Address:	192.168.1.2	
Subnet Mask:	255.255.255.0	
Router:	0.0.0.0	

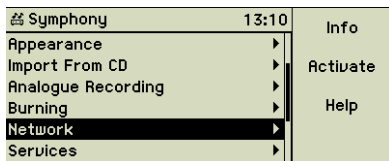
After every change of the network configuration you must confirm them to get them activated.



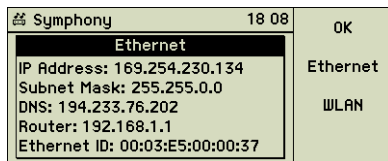
This allows you an easy fallback to the currently working configuration, if you are not sure what you have done.

7.3 IP addressing

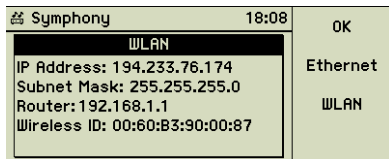
The currently used IP addresses can be displayed any time using function key 1 "Info".



F1



F3



IP address, subnet mask, router address, and name server address can be manually entered only in Expert Mode. Using the Home Network mode the music center acts as a DHCP client and searches the connected network for a provider of these data.

If the music center is configured as "Symphony/Musica Network" it assumes being the central server of a private network (acc. RFC 1918). It provides a DHCP service and distributes IP addresses to connected devices out of 192.168.1.0/24 range.

7.4 Network connection

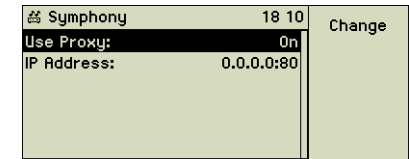
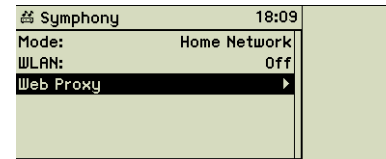
In Export Mode two modes can be chosen here.

"Network Connection = Ethernet": The manually defined IP address is used for both Ethernet and WLAN and all ports are connected by port switching. Concerning the WLAN the music center is an Access Point.

"Network Connection = WLAN": The manually defined IP address is used for WLAN only, acting as a simple client. The Ethernet ports are using a Zero Config System and are connected by routing to the WLAN port.

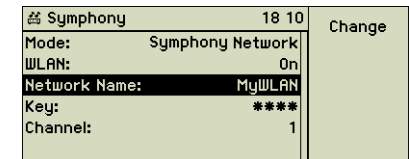
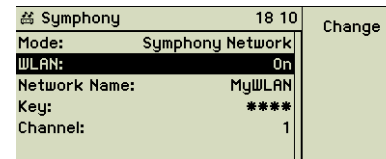
7.5 Web Proxy

If your music center is using a Proxy server to connect to the Internet, you can configure its address in Expert Mode.



7.6 WLAN

For all modes the WLAN function can be enabled/disabled separately.



- **Symphony/Musica Network:** The music center acts as WLAN Access Point. Network Name, Key and Channel can be set as you like. The chosen settings must be used by the other computers on logging into the music center.
- **Home Network:** The music center acts as WLAN client. Network Name and Key must set to the corresponding values of the available Access Point. Using these settings the music center logs on to it.

- **Expert Mode:**
 - Network Connection = Ethernet
The music center acts as WLAN Access Point. Network Name, Key and Channel can be set as you like. The chosen settings must be used by the other computers on logging into the music center.
 - Network Connection = WLAN
The music center acts as WLAN client. Network Name and Key must set to the corresponding values of the available Access Point. Using this settings the music center logs on to it.

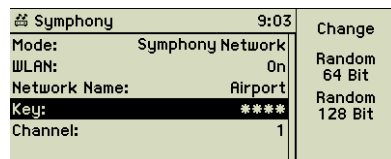
Network name and Key

If the music center is configured as "Home Network" please enter network name and key of your existing network.

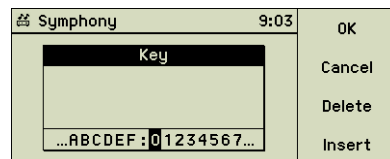
If the music center is configured as "Symphony/Musica Network" you have to name the network by yourself and create a key for its protection. Other devices have to use these data for accessing your wireless network.

For an easy crossplatform access we recommend that you do not use spaces or special characters for the network name.

To protect its wireless LAN access the music center supports keys in hexadecimal notation (00 .. FF) with 64 resp. 128 bit WEP encryption. 24 bits of the encryption are used as initialisation vector, so sometimes these methods are called 40 bit resp. 104 bit encryption.



F1

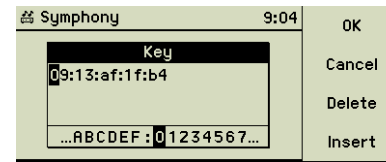


Key examples:

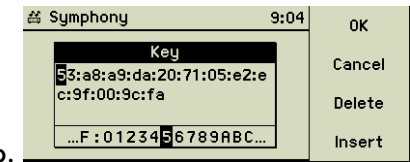
- using 64 (40) bit encryption: 3F:F2:35:4A:A4
- using 128 (104) bit encryption: 42:EE:FD:49:EF:8E:6C:4C:2E:32:99:BD:39

To get only valid WEP keys the music center provides a special edit field. Only valid characters and digits are available.

Additionally a random key generator let you create 64 and 128 bit keys automatically. Press function key 2 "Random 64 Bit" or function key 3 "Random 128 Bit". The edit window opens and proposes a key. Using the Turn&Select wheel you may change it as you like.



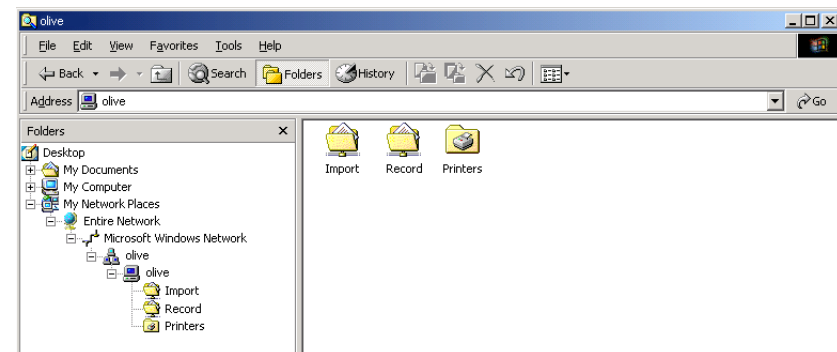
resp.



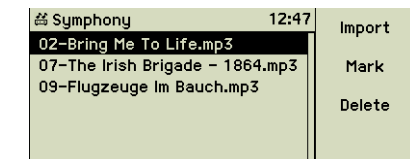
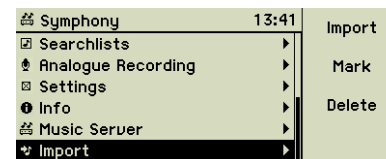
Please do NOT use one of the example keys printed here! Create your own and use the random key generator.

7.7 Copying music from a PC to your music center

By default the music center is configured as a Windows file server (SMB server) and publishes the volume "Import". Computer name is the name of the music center and it is registered in the workgroup "Olive". No password is necessary. This file server option can be used by any Windows- and Mac OSX - PC.



If you copy MP3, AIFF, WAV, FLAC, AAC, or Ogg Vorbis music files or even complete folders with music files to this folder, they are stored there and can be imported into the music center using the main menu option "Import"



Pressing function key 1 "Import" starts the import of the selected songs or folders into the music library of the music center. There are no checks for duplicates or supported file formats. Depending on number and size of these files this may last some minutes. Afterwards the imported music files are deleted automatically from the "Import" folder.

7.8 Copying music from your music center to a PC

Besides the volume "Import" the music center publishes the volume "Record". It contains the original uncompressed files of analogue recordings. As long as they are not removed manually they stay there. For archiving purposes you may transfer these files to your computer before deleting them from this volume.

8 HELP!

8.1 "My music center is dead..."

If pressing buttons and turning wheels do not produce any reaction of your music center, please try these first suggestions:

- Press the Power On/Off button (1) on the front of your music center for about 4-5 seconds. The music center should now been switched off.
Press this button again for switching the music center on again. It needs about 40 second for the initialization process and then the main menu should be displayed again. Your stored music is not endangered by this action.
- Unplug the music center's power cord from its AC outlet. Wait a few seconds and plug it in again. Now press the On/Off button (1) on the front of your music center. It needs about 40 second for the initialization process and then the main menu should be displayed again. Your stored music is not endangered by this action.

If these actions did not do the trick, please get your "Recovery CD" and follow the instructions of the next section.

8.2 Recovery CD

The music center package contains a Recovery CD, which can be used to restore the operating system software to a music center. Please note that in a worst case scenario of this restore process all your music songs and the accompanying meta data may get lost!

1. Power off the music center using the button or unplugging the power cord.
2. Switch the music center on by pressing the On/Off switch (1) while holding down the Play button (5) until the music center's display shows three CD icons and the music center icon.
3. Insert the Recovery CD into the slot. Please note that the music center waits only about 10 seconds for a CD. Then the music center starts using the operating system of the CD.
4. Choose the display language.
5. The display shows these four options:
 - Delete (F1): The music center will be forced to the factory settings. Everything, including music and data is deleted. After this process the music center is fresh out of the box.

- **Recovery (F2):** Only the operating system is restored. Music and data are not touched. If this option fails, or shows error messages, or in any other respect did not complete smoothly, you have to choose Option 1 for recovering.
 - **Reboot (F3):** Cancel all this recovery stuff and restart the music center in its normal way.
 - **Power off (F4):** The music center is switched off.
6. Press the appropriate function key and the chosen process starts, showing status messages during its progress.
 7. On successful completion the music center shows a message on the display and can be restarted in its normal way.

8.3 Software update

To gain from the technological progress and the development of the music center software you may update the internal software of the music center using a CD of the manufacturer or via the Internet.

8.3.1 Software update via Internet

Choose the main menu option "Info" and "Version".

♫ Symphony	11:43	Software Update
Version:	2.0	
Serial No:	012345	
Disc size:	80 GB	
Free space:	86%	
Artists:	249	
Albums:	134	

If you press function key 1 "Software Update" the music center starts to search for recent software updates on the manufacturer's web site.

♫ Symphony	14:09	Software Update
Looking for software update...		
Version:	1.0	
Seriennummer:	000007	
Disc size:	80 GB	
Free space:	91%	

♫ Symphony	18:11	OK
Software Update		Cancel
Neue Version: 2.1		
Größe: 55789 bytes		

If an update has been found, it is displayed together with its size. Pressing function key 1 "OK" again starts the updating.

Downloading software update...
<div></div>

Installing software update...
<div></div>

After successfully updating the software the music center has to be restarted. This happens automatically after displaying a short notice. Then all the new features are available.

8.3.2 Software update using a CD

If your music center is not connected to the Internet, you can download a CD image containing the update software from the music center update page on the Internet (www.olive.us).

1. To download the CD image click the link on the update page.
2. Unzip the file using appropriate software (WinZIP, Stuffit Expander, etc.).
3. Burn the ISO image to a CD-R by choosing the "ISO image" option of your burn software.



Do not unpack the ISO image file or put the image file itself as a single file on the CD-R. This would render your update CD useless!

Using this selfmade CD the system software of the music center can be updated.

1. Switch off the music center by pressing the On/Off button (1) for about 2-3 seconds until the "curtain" starts closing, then release it.
2. Switch the music center on by pressing the On/Off switch (1) while holding down the Play button (5) until the music center's display shows three CD icons and the startup screen icon.
3. Insert the CD into the slot. Please note that the music center waits only about 10 seconds for a CD.

Then the music center starts using the operating system of the CD and the update procedure is launched automatically.

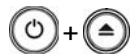
4. On successful completion the music center shows a message on the display and has to be restarted in its normal way. While restarting, the CD is then ejected.

8.4 Useful key combinations

Some buttons of the music center front panel can be used together for special purposes. Your music center must be switched off for these functions.



Icons of three CDs and the music center logo are displayed. You may insert a recovery, or update CD. Please note that the music center waits only about 10 seconds for a CD. Then the music center starts using the operating system of the CD.



The CD in the CD drive is ejected.



All pending tasks of your music center are stopped: Importing or encoding of music, the iTunes cache is cleared and a connected iPod is treated as newly connected.

8.5 Overview of all menu options

Main menu	Level 1	Level 2	Level 3	Level 4
Artists	Names of the artists sorted alphabetically	All...	All songs of the artists sorted alphabetically	
		All albums of the artists sorted alphabetically	All songs of the album as they appear on the album	
Albums	Names of the albums sorted alphabetically	All songs of the album as they appear on the album		
Songs	Names of the songs sorted alphabetically			
Genres	Names of the genres sorted alphabetically	All...	All...	All songs of the artists
			All albums of this genre	All songs of the album
		All artists of the genre sorted alphabetically	All...	All songs of the artists
			All albums of the artists of the genre	All songs of the album
Playlists	Names of the playlists sorted alphabetically	All songs sorted by the user		
Searchlists	Names of the searchlists sorted alphabetically	All songs matching the search criteria sorted alphabetically		
Analogue Recording	empty	(New)		

Main menu	Level 1	Level 2	Level 3	Level 4
	or names of the recorded files sorted alphabetically	if already cut, a list of the songs		
Settings	Language	(English/Deutsch/Français)		
	Date & Time			
	Play mode	Random	(On/Off)	
		Repeat	(On/Off)	
		Fading		
		Volume Lineout		
		Volume Headphone		
		On CD insert...	Play songs	(On/Off)
		Dynamics compression	Compression	(Off/Night/Loud/Expert)
	Appearance	Contrast		
		Brightness		
		Small Letters	(On/Off)	
		Column View	(On/Off)	
		Track Numbers	(On/Off)	
		Spectrogram	(On/Off)	
		Large Play View After		
	Import from CD	Encoder	(AIFF/FLAC/MP3/WAV)	
		Data Rate	(Good/High/Higher/VBR/CD-Quality)	
		If VBR is chosen: VBR Quality		
		Play While Importing	(On/Off)	
		On CD insert...	Import Songs	(On/Off)
			If Import is chosen: Eject After Import	(On/Off)

Main menu	Level 1	Level 2	Level 3	Level 4
Settings (cont.)	Analogue Recording	Auto Dividing	(On/Off)	
		Gap Between Tracks		
		Auto Adjust Level	(On/Off)	
		Recognition Method	(Music/Speech)	
	Burn	Disc Format	(Audio CD)	
		Speed	(Secure/Fast)	
		Gap Between Songs		
	Network	(Symphony/Musica Network, Home Network, Expert Mode)		
	Services	UPnP/AV	(On/Off)	
		iTunes (DAAP)	(On/Off)	
	CD Database	Online Access	(On/Off)	
		If Online Access is chosen: Server URL		
Info	Device Name			
	Factory Settings		(Restore)	
	Recovery		List of files (Restore)	
	Serial No Disc size Free space Artists Albums Songs Genres CD Database			
Music Server	Symphony/Musica	(Select)		
	List of available music servers	(Select)		
Internet Radio	Custom... Top 100... List of predefined genres			
Import	List of files stored in the Import volume	(Import/Mark/Delete)		

8.6 Frequently Asked Questions

Is my music center “noisy”?

The music center does not have any fan. All of its components are developed for very low energy consumption. We measured an average power consumption of 0.6 watts during stand-by and 7 watts during playback.

Can my music center just play my music CDs?

You may insert a music CD and listen to it without importing it into the music center. The internal database is scanned for the meta data (Artist, title, track titles) and it is displayed automatically (See section 2.2 «Playing a music CD» on page 10).

Do I need an Internet connection to see the title of my CD on my music center’s display?

No, the music center has an integrated database filled with information of about 2 million CDs. But an Internet connection is useful for getting the latest information (See section 4.10 «CD database» on page 27).

What is “Multiroom Streaming”?

The music center can stream music to up to five different devices (called “clients” or “satellites”). You may listen to different songs in different rooms at the same time (See chapter 5 «Networking» on page 29).

What kind of components or “satellites” are usable for “Multiroom Streaming”?

You may connect other music centers or PCs (i.e. with iTunes) to your music center. The UPnP AV protocol is supported and the music center can communicate with all other components supporting this standard. In addition Olive offers a wireless music receiver called Sonata. For more details please visit us at www.olive.us.

What is meant by “integration with iTunes”?

The music center supports Apple’s Bonjour technology and acts in a network like any other iTunes server/client, presenting its own library and looking for other libraries. The music center “sees” all published music servers and can play their songs. Equally other clients “see” the music center and can play its songs. Playlists can be used, too (See section 5.3 «Your music center and iTunes» on page 30).

Can the WLAN option be disabled?

Yes (See section 7.6 «WLAN» on page 35).

Can I copy music tracks from my music center to my iPod?

Yes, you can transfer music tracks stored on your music center to your iPod (See section 3.6 «Connecting an MP3 player» on page 21).

Can I receive Internet radio (shoutcast, iccast, ...) with my music center?

Yes, you can listen to Internet radio stations (See section 3.5 «Internet Radio» on page 20).

Can I create playlists?

Yes, you can define your own playlists on your music center. Additionally, you may create Searchlists, dynamic playlists whose content is defined by search criteria based on the meta data. These lists are also available on the satellites. See section 3.1 «Playlists» on page 12 and section 3.2 «Searchlists (Smart playlists)» on page 13.

Can I copy music files from my PC's hard disk to my music center?

Yes, you copy your files to an import folder, the music center is publishing on a computer network. The music center cannot play back encrypted music files (See section 7.7 «Copying music from a PC to your music center» on page 36).

Is it possible to synchronize my PC's music file collection automatically with the collection inside my music center?

No, this cannot be done automatically. You may copy the music files manually to the music center's import folder (See section 7.7 «Copying music from a PC to your music center» on page 36).

Do I have to use my music center for editing and administrating my music collection or may I use my PC for this purpose?

If your music center is connected to your local area network, you may administer the music center's data using a web browser. This makes it a lot easier to enter text or edit existing meta data (See chapter 6 «Using a Web Browser for managing your music center» on page 32).

Can I use my music center to play MP3 CDs or DVDs?

Technically it is possible. We have decided to omit this feature due to legal reasons. When the situation concerning copyright and digital rights management has been settled, we'll look again into this issue.

Can my music center burn songs as MP3 files on CD?

No, due to the same decision concerning copyright, this is not possible right now.

Can my music center convert music files from one format to another?

No, for this purpose you should use a computer.

How can I import my record collection or music tapes into my music center?

The turntable or tape deck is connected to your stereo amplifier. You may connect an audio out port of this amplifier to the music center's analog audio in port. Then you can select the main menu option Analogue Recording to import the signals available (See section 3.4 «Digitizing sounds of vinyl records and analog music tapes» on page 16).

Can I connect any external hard disk to my music center?

Only Olive's music center Backup Hard Disk can be connected. This allows easy backup and restore of the contents of the music center (See section 3.7 «Backup your music collection» on page 22).

Which accessories can be connected to my music center's USB ports?

You may attach an MP3 player (See section 3.6 «Connecting an MP3 player» on page 21), the Olive Backup Hard Disk (See section 3.7 «Backup your music collection» on page 20), or the Olive Keyboard.

Can I exchange the internal hard disk of my music center by myself?

No.

Is it possible that errors occur during the import of music CDs into my music center, comparable to these effects using a PC?

Yes, this is not completely avoidable.

Are firmware updates planned? How does the installation work?

Yes, this is planned. It can be done via Internet or using Update CDs provided by us (See section 8.3 «Software update» on page 38).

Does my music center perform real routing between the WLAN and the four Ethernet ports?


Yes, you may choose an appropriate setting (See chapter 7 «Advanced Networking» on page 34).

9 TECHNICAL DATA

	Symphony	Musica
Features:		
• Hard disk capacity	80 GB	160 GB
• CD drive	Yes	Yes
• Integrated music database (freeDB)	Yes	Yes
• High resolution backlit display	400 x 160 4 grey levels	400 x 160 4 grey levels
• Supported formats	Music CD, CD-R, CD-RW	Music CD, CD-R, CD-RW
Supported import formats:		
• MP3 CBR	128 kbit/s (good) 160 kbit/s (high) 192 kbit/s (higher) 320 kbit/s (CD Quality)	128 kbit/s (good) 160 kbit/s (high) 192 kbit/s (higher) 320 kbit/s (CD Quality)
• MP3 VBR	6 levels	6 levels
• AIFF/WAV bitrate	1,411.2 kbit/s	1,411.2 kbit/s
• FLAC bitrate	700 bis 1,411 kbit/s	700 bis 1,411 kbit/s
Supported playback formats:		
• MP3 and MP3 VBR	64 kbit/s - 320 kbit/s	64 kbit/s - 320 kbit/s
• AAC	64 kbit/s - 320 kbit/s	64 kbit/s - 320 kbit/s
• FLAC	16 Bit, up to 1,411.2 kbit/s	16 Bit, up to 1,411.2 kbit/s
• Ogg/Vorbis	64 kbit/s - 320 kbit/s	64 kbit/s - 320 kbit/s
• AIFF/WAV	16 Bit, up to 1,411.2 kbit/s	16 Bit, up to 1,411.2 kbit/s
• Supported sampling rates	11,025 - 48,000 Hz	11,025 - 48,000 Hz

	Symphony	Musica
Dynamics compression of loudness		
• Night Mode		
Activation Method	Hard Knee	Hard Knee
Threshold	-24 dB (1 dB step)	-24 dB (1 dB step)
Ratio	2.5:1 (0.1 step)	2.5:1 (0.1 step)
Attack	5 ms (1ms step)	5 ms (1ms step)
Release	0,3 s (0.1 s step)	0,3 s (0.1 s step)
• Loud Environment		
Activation Method	Soft Knee	Soft Knee
Threshold	-48 dB (1 dB step)	-48 dB (1 dB step)
Ratio	2:1 (0.1 step)	2:1 (0.1 step)
Attack	30 ms (1ms step)	30 ms (1ms step)
Release	0.6 s (0.1 s step)	0.6 s (0.1 s step)
• Expert		
Activation Method	Hard or soft	Hard or soft
Threshold	-60 to -6 dB	-60 to -6 dB
Ratio	1:1 to 6:1	1:1 to 6:1
Attack	1 to 50 ms	1 to 50 ms
Release	0.1 to 1 s	0.1 to 1 s
Speed of CD drive:		
• Read	12x	12x
• Burn a CD-R		
fast mode	up to 24x	up to 24x
secure mode	8x	8x
• Burn a CD-RW		
fast mode	up to 16x	up to 16x
secure mode	8x	8x
Front panel:		
• CD slot with automatic loading	Yes	Yes
• On/Off , Start/Pause, Stop, Last track, Next track, Record, CD Eject	Yes	Yes
• Display	Yes	Yes
• Four function keys	Yes	Yes
• Turn&Select wheel	Yes	Yes
• Remote control receiver	Yes	Yes
• Headphones plug	Yes	Yes

	Symphony	Musica
Back panel:		
• Power connector	Yes	Yes
• 4-Port-Switch 10/100 MBit auto-sense Ethernet	Yes	Yes
• USB 1.1/2.0 ports	2	2
• Antenna for wireless LAN	Yes	Yes
• Analogue line-in Cinch	Yes	Gold-plated
• Analogue line-out Cinch	Yes	Gold-plated
• Digital line-out S/P DIF optical Toslink	Yes	Yes
• Digital line-out coaxial-Cinch	Yes	Yes
Characteristics:		
• Frequency Response (in Hz)	10-20,000 (+0/-1.4 dB)	10-20,000 (+0/-1.4 dB)
• Signal to noise ratio (plus distortion, A-weighted):		
Playback	≥ 85 dB	≥ 85 dB
Record	≥ 80 dB	≥ 80 dB
• THD+N (Playback) (in dB FS A / %)	≤ -85 dB	≤ -85 dB
• THD+N (Record) (in dB FS A / %)	≤ -84 dB	≤ -84 dB
• Channel separation	≥ 80 dB	≥ 80 d
• Full Scale Line Output	2 Vrms / 100 Ohm	2 Vrms / 100 Ohm
• Full Scale Line Input	2 Vrms / 10 kOhm	2 Vrms / 10 kOhm
• RCA: max. output level	5.66 Vpp	5.66 Vpp
• S/P DIF output	0.5 Vpp, 0 Vdc	0.5 Vpp, 0 Vdc
• Sampling rate S/P DIF	44,100 Hz	44,100 Hz
Packing list:		
• Hardware	Symphony	Musica
• Power cord	Yes	Yes
• Cinch audio cable	Normal	top grade
• Optical Toslink audio cable	-	Yes
• Remote control with batteries	Yes	Yes
• Antenna for wireless LAN (WLAN)	Yes	Yes
• Recovery CD	Yes	Yes
• Registration card	Yes	Yes
Dimensions		
	W: 435 mm	W: 435 mm
	D: 290 mm	D: 290 mm
	H: 85 mm	H: 85 mm
Weight (without accessories and packaging)		
	4.3 kg	4.8 kg



Olive Media Products Inc.
555 Howard Street
San Francisco, CA 94105

<http://www.olive.us>
Tel.: +1 415.908.3870
Fax: +1 415.908.3932