# Olive OPUS N°5 - User Manual

# Welcome!

Congratulations and thank you for purchasing an Olive OPUS. Your OPUS will provide you with a whole new concept of high fidelity listening in this era of innovative technology. Relax and enjoy the ease of your new OPUS – and its beautiful sound!

- To ensure the best possible performance, please read this manual carefully. Keep it in a safe place for future reference. All warnings on the product and in this user manual should be adhered to.

- Since the OPUS software continues to be maintained and updated, the version on your OPUS may differ from the one that is referenced here in screen messages or design. The most current version of this user manual can always be found on the Olive website (www.olive.us).

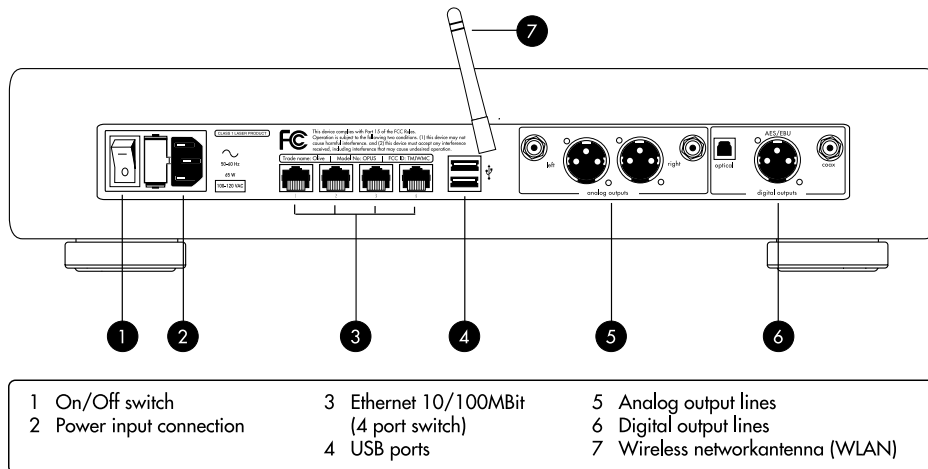# CONTENTS

# 1 QUICK-START GUIDE

## Step 1: Unpacking your OPUS

Your package includes the following items:

- OPUS pure audio system
- Remote control (w/ batteries)
- Cables: RCA, power
- Software: Recovery DVD, Upgrade CD, user manual

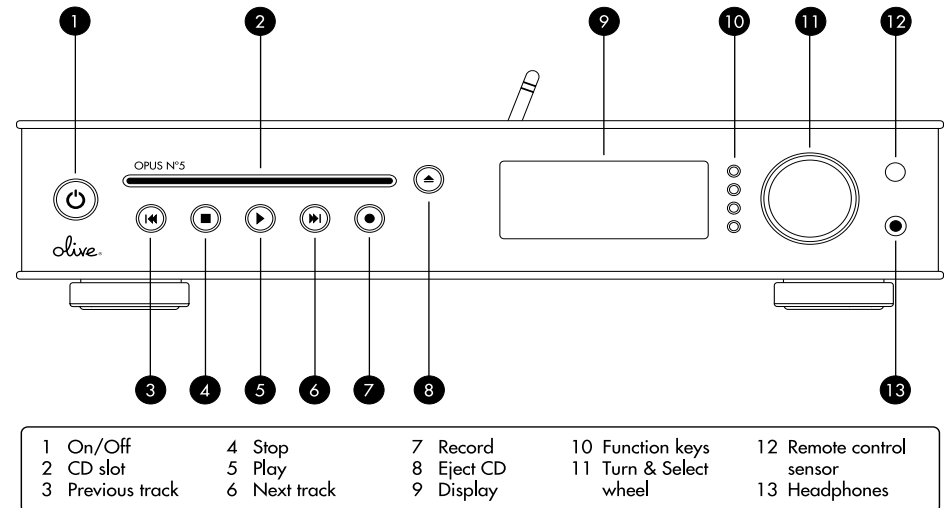## Step 2: Setting up your OPUS

- Place your OPUS close to your stereo system, in a cool, well-ventilated place.
- Attach the wireless antenna (7).
- Connect it via its RCA or digital output to the input of your stereo system.
- Plug the power cable into your OPUS and into the power outlet.
- Turn on the OPUS and your stereo system.



| | | | |
|---|---|---|---|
| 1 | On/Off switch | 3 | Ethernet 10/100MBit |
| 2 | Power input connection | | (4 port switch) |
| | | 4 | USB ports |

| | |
|---|---|
| 5 | Analog output lines |
| 6 | Digital output lines |
| 7 | Wireless networkantenna (WLAN) |

Your OPUS takes about 40 seconds to boot up from a cold start. Please never unplug your device while it is turned on or in sleep mode, it might damage your device.

## Step 3: Navigating your OPUS

Your OPUS provides the following navigational controls, and in the following we'll be referring to this picture:



| | | | | | |
|---|---|---|---|---|---|
| 1 | On/Off | 4 | Stop | 7 | Record |
| 2 | CD slot | 5 | Play | 8 | Eject CD |
| 3 | Previous track | 6 | Next track | 9 | Display |

| | | | |
|---|---|---|---|
| 10 | Function keys | 12 | Remote control |
| 11 | Turn & Select | | sensor |
| | wheel | 13 | Headphones |

- Once the OPUS is on, you'll mostly be using the jog-shuttle or wheel (11). Use the inner-wheel to scroll up and down. Turn the outer-wheel to the right (clockwise) to select an item or to the left (counter-clockwise) to go back one level.
- The soft keys to the right of the display (10) allow to choose functions that are relevant for a particular context ("soft" because the functions they allow are soft-coded, with changing uses for different screens).
- The other buttons (3-8) behave just like the buttons on a CD-Player.
- Use the remote just like the other buttons – while sitting down. Hit the MENU button on your remote twice anytime you want to see the display with large letters in "couch view". It doesn't get much easier than that.
- To put your OPUS to sleep, just press the ON/OFF button (1) shortly. To turn it off completely, hold down the same button for a few seconds.

Note: Within this user manual we will refer to screen menu options in CAPITAL letters for easier readability, even though on the screen you will see them written starting with a capital and then small letters. Starting point will always be the main menu, the top most menu to which you can always return by continuing to turn the jog-shuttle to the left.

## Step 4: Play a CD

Insert a CD into the slot, select the track you like, press play.

## Step 5: Connecting your OPUS to a wireless home network

You can skip this step if you don't want to access music stored on your computer, or listen to internet radio, or use the web browser to manage your music:

- Go to SETTINGS & SPECIALS > NETWORK > CONFIGURATION and select HOME NETWORK.
- Select NETWORK NAME and press SEARCH to detect your network.  You might have to choose WEP or WPA encryption and enter a KEY if your network is protected.
- Turn the outer-wheel to the left and select SAVE.

Your OPUS is now integrated into your home network.

## Step 6: Getting music into your OPUS

To add music to your OPUS you can …

- … import from CD: Just insert an audio CD, wait until it is recognized, and press the IMPORT button. The CD is recorded, tagged and archived automatically. You can re-cord music in different formats. Just go to SETTINGS & SPECIALS > IMPORT & BURN > COMPRESSION and choose the format you want. We recommend FLAC to retain CD quality audio but reduce size at what is called "lossless" compression, and MP3 (Data Rate: Higher) for the best compromise between quality and capacity.
- … stream music from a Mac/PC: In the main menu select MUSIC SERVER and choose the computer you want to access music from (that music library must be published via iTunes or UPnP compatible software).  You can now access the music as if it were stored directly on your OPUS.

  Note: Only music formats that are supported by your OPUS can be played (WAV, AIFF, FLAC, MP3, OGG, WMA, AAC).  The OPUS does not play music protected by Digital Rights Management.

- … listen to internet radio: In the main menu select INTERNET RADIO and choose from a wide variety of stations (you might have to wait a few seconds until their information is loaded to the OPUS via the network).

## Step 7: Creating playlists

Now that you have music on your OPUS, you can easily create playlists for every mood or occasion. There are two ways:

- On the OPUS:
  1) Go to LIBRARY > PLAYLISTS, press NEW and enter the name of your playlist and save it.
  2) Browse your music library and select the tracks you want to add to the playlist. The MARK button allows you to select several tracks.  After you have selected the tracks press ADD TO LIST and then select the playlist and press ADD TO LIST again.

- Via the RONDOTM web browser: 1) Go to SETTINGS & SPECIALS > NETWORK and press the INFORMATION button. Write down the IP address of your OPUS.  2) Enter the IP address in your browser and create playlists through the web interface. Note: Your OPUS must be connected to your network.

You can also create smart playlists (called SEARCHLISTS) that dynamically adjust when your music library changes based on search criteria such as 'all tracks which I gave a 5 star rating'.  There is more on this in the relevant later section of this manual.

## Step 8: Take the music with you

There is no reason why you shouldn't enjoy your music some place else too.  Just use the OPUS to …

- … burn your music to CD: Select the playlist or album that you want to burn and press the RECORD button.  Insert an audio CD and choose OK.
- … copy music to your Apple® iPodTM or other portable device: Connect your iPod to the OPUS's USB interface and select the track/artist/album that you want to copy. Press the ADD TO LIST button, select the iPod from the menu and press ADD TO LIST again. The tracks will now be transferred.

Never unplug your iPod while a music transfer is in progress, and always use the EJECT button on the OPUS before unplugging your iPod.  Otherwise you might damage or lose data on either device.

## Step 9: Keep in touch

Please register your product online at our website (www.olive.us) to activate your warranty and stay up-to-date with our latest product releases.

Great, now you can get back to your music!

# 2 USING YOUR OPUS

## 2.1 Playing Music

### Playing a CD

Insert the CD. The OPUS recognizes the CD and looks for the matching tag information as to album, track titles etc., which is not actually stored on the CD itself:

- In almost all cases the tag information of the CD is stored in the internal CD reference database on your OPUS and taken from there

- Otherwise – if your OPUS is on the network and you have allowed this in the settings (SETTINGS & SPECIALS > NETWORK > CD DATABASE > ONLINE ACCESS), the information is searched for in the online Olive database

- If the CD cannot be found at all, generic titles for the album and titles are assigned e.g. "Audio CD 2007-07-15 18:44" and "Track 01", and other fields are filled with "Unknown"

The CD is then listed on the main menu as the top item, ready for play. As on any CD player, the control buttons below the CD slot give you the options to play, skip forwards or backwards, pause or stop play. The Eject button returns the CD to you.



### Play modes

You preset what your OPUS should do with a new CD, the 2 options are:

- The CD starts playing automatically

- OPUS waits for you to choose a track and start it by pressing the play/pause button

To change this setting follow this navigation SETTINGS & SPECIALS > GENERAL SETTINGS > PLAY MODE > AUTO PLAY AUDIO CD. Once there you will see that here you can also influence what happens anytime you press the play button:

- RANDOM: OPUS plays tracks from the selected album or playlist in random order

- REPEAT: OPUS repeats the selected track(s), album or playlist until you stop the loop

- FADING: OPUS fades out one track to the next, you can set the time interval for this

The random and repeat functions are available for you to choose each time you play a song – just look on the right of the screen to find the appropriate soft key.

### What is shown on the screen

While a track is playing, artist, album title, and track title are displayed. Long names are displayed alternating from the left and right. You can adjust what is shown the settings menu:

- Run time, total time, and remaining time (default), or run time and track number as to total tracks of the album or playlist

- A spectrogram can be displayed, which is a real-time audio spectrum analysis to visualize the music you are listening to (default is off)



If the large "couch view" is enabled, the display switches after a preset time to this view, enabling you to see the track title and artists from further off, like your couch. Follow SETTNGS & SPECIALS > GENERAL SETTINGS > APPEARANCE > LARGE PLAY VIEW AFTER, default is on after 20 seconds.



### Playing music off the hard-disk: Your music library at your fingertips

Use the different navigation options available under LIBRARY to quickly find the albums, playlists, searchlists or track(s) you want to play. Then press the play button and the music starts.



5

- ARTISTS: This option reveals an alphabetical list of all artists in your music library. Behind each artist you find the list of his/her albums and behind each album its tracks. "All…" shows all tracks of the chosen artist including tracks which are not part of an album.
  The cursor defines the set of tracks to be played or added to a list. Is the cursor on the name of an artist and you press the play/pause button, all albums and tracks of this artist are played one after another. Is the cursor on the name of an album and you press the same key, the tracks of this album only are played.

- COMPOSERS (when activated, default is off): Classical music is often sorted by composer, and so fans of classical music should switch on this option to be able to search their collections by an alphabetical list of composers, just as if they were searching by a specific artist. Follow SETTNGS & SPECIALS > GENERAL SETTINGS > APPEARANCE > CLASSICAL MODE to make the change.

- ALBUMS: As with looking by artists, here you get an alphabetical list of all albums, and you drill down and find the tracks to a specific album. You can either play the whole album or use the cursor to select the set of tracks to be played or added to a list.

- SONGS: Here you get an alphabetical list of all tracks ("song" and "track" are used interchangeably in this user manual). You can either play a specific track or use the cursor to select the set of tracks to be played or added to a list.

- GENRES: Behind every genre you find the list of artists, albums, and tracks assigned to this genre. "All…" shows all tracks of the chosen genre including tracks which are not part of an album. Genres without assigned tracks are not visible here. But you may choose from all genres when assigning one to a track or an album. You may add your own genre by just typing an appropriate text into the genre field of a track, album, or artist.

- PLAYLISTS: Here are all the playlists you've defined in alphabetical order. Choose the one you like, or use your cursor to select the tracks to be played. More on how to create them is in a later section.

- SEARCHLISTS: Here are all the searchlists you've defined in alphabetical order. Choose the one you like, or use your cursor to select the tracks to be played. More on how to create them is in a later section.

Information that is shown on the screen during play mode, controls etc. are just the same as described above for listening to a CD.

## 2.2  Listening to Internet Radio

If your OPUS is connected to the internet, selecting INTERNET RADIO from the main menu opens an additional world of unlimited music. The streaming process usually needs some open outgoing ports in the range of 8000 to 8005, but other ones are possible, too. If your OPUS 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 usually will provide more information on how to do this.

A long list of predefined stations is available from the start. They are sorted by genres, there is one category of top 500, which is determined by popularity measured across all users and will change over time, and you can save your favorites so that you can always quickly return to them.

- MY STATIONS: Your own list of favorite online stations. Once you have found a radio station you like, hit the soft key REMEMBER and the current station is added to the list.



Here you can also add stations you were not able to find in the other lists by:

1. hitting the soft key NEW, entering a name for this radio station, and confirming with OK

2. entering the URL of this station, and confirming with OK.
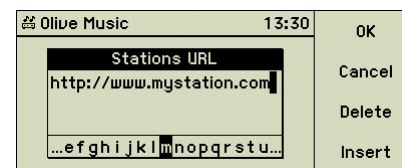


OPUS supports two kinds of URLs (web addresses):

- Direct URLs which allow to download the MP3 files immediately after the connection has been established.

- URLs with suffixes like ".pls" or ".m3u". The second type provides a list of music servers, which are tried one after another until a connection is established.

- TOP 500: Look here for the 500 most popular Internet radio stations, listed in descending order by streaming quality. Obviously this list is not static but changes over time.

6

• Predefined stations by genre: For a list of genres ranging from ALTERNATIVE to WORLD, here you can browse the world to your heart's content. Again, stations are listed in descending order by streaming quality. Initially the lists are empty, please press the soft key SEARCH or turn the outer ring of the jog-shuttle to the right, and OPUS will fill the list.

## Receiving a radio broadcast

Choose the entry you like and turn the outer ring of the jog-shuttle to the right or press the play/pause button. The soft key INFORMATION will show you more details of the radio station such as genre or current number of listeners, the soft key REMEMBER will add the station to the list of your favorites.

To change to the next station of the list, press the skip button on the front panel or the remote control.

## 2.3  Importing Music from Digital Sources like CDs, PCs or iTunes

### Importing CDs
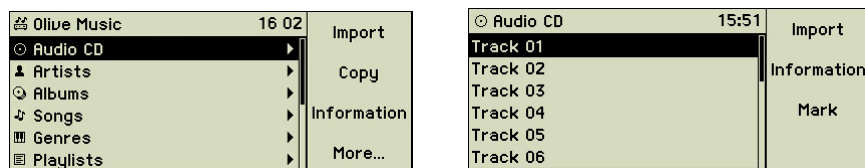


After inserting a music CD, its title is shown as the topmost entry of the main menu. Press the record button or the soft key IMPORT to import all tracks of the CD into OPUS' hard disk. If you want to import only selected tracks, select and mark these tracks before starting the import. The recording of a CD happens in two steps:

1. OPUS first records the music files on the hard disk without any compression or encoding
2. The second step is the encoding of these files in the chosen format

Once the first step is completed you can eject the CD and insert the next one, but you should note that both the OPUS and record icons in the display header are flashing, signaling that the OPUS is still busy encoding/reformatting the files of the first CD. During the encoding, the system response times of the OPUS may be not as quick as usual.

**Caution:** While this encoding icon is present, do not edit the tag information of your library and do not power the OPUS off.  This action could end the encoding of the files and result in lost or corrupt files.

The progress of the import is shown on the display. It's possible to listen to the tracks while the import takes place – you can influence this as part of the settings, default is off. Since the import time is much shorter than the playing time, listening and importing is not in sync.

CDs which are not recognized by the internal or online CD reference databases are labeled generically as e.g. "Audio CD 2007-07-15 18:44", using the import date and time. If you want to import tracks already stored in OPUS, you are presented with a choice of overwriting or skipping these. After the import you can check the encoding format and the amount of space of your imported files by hitting the soft key INFORMATION.

Please note that duplication of copy-protected audio CDs may infringe copyright and digital rights laws of your country.

## Copying music from a PC/Mac to Olive OPUS

By default OPUS is configured as a Windows file server (SMB server) and publishes the folder "Import" on the home network. For the computer name the device name of the OPUS is used, and it is registered in the workgroup "OPUS", no password is necessary. This folder should then be accessible by any Windows- or Mac OS X PC. Here is an example of a Windows PC view of the OPUS folder.
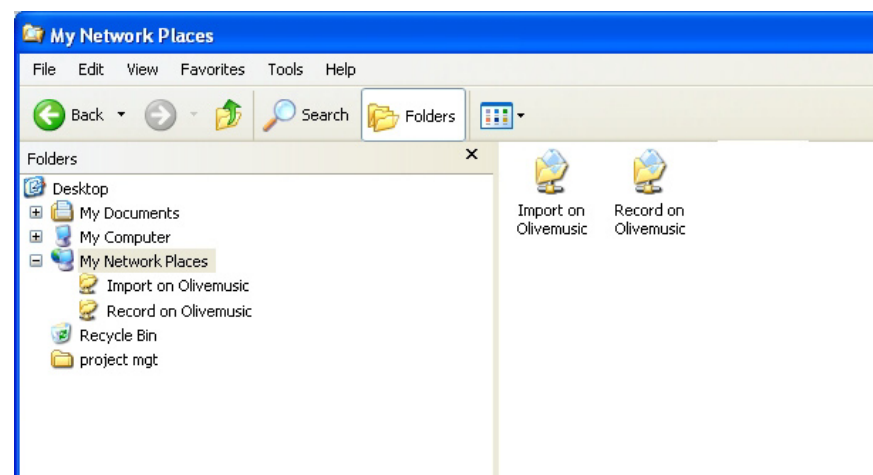


From within Mac OS X in the Finder look for the "Go" menu item, and there look for the "Connect to server…" function, where you enter the current IP-address of your OPUS.

When 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 and can subsequently be imported into the OPUS music library using the main menu option IMPORT, which becomes available on screen when the Import folder contains something. Note that formats that the OPUS does not support are ignored and remain in the Import folder until they are deleted there.

Pressing the soft key IMPORT starts the import of all audio files, which, depending on number and size of these files, may last some minutes. To select a subset of tracks hit the IMPORT soft key and turn the outer ring of the jog-shuttle shortly to the right. Mark the tracks that you want to import and press the IMPORT soft key again. During import there are no checks for duplicates or supported file formats. Also, files cannot be reformatted as part of the import process, meaning that they should already be in the format you wish them to be

on the OPUS. Afterwards the imported music files are automatically deleted from the Import folder.

Please note that the transfer of audio files from the OPUS to a PC or Mac is possible via a "Record" folder the OPUS publishes. However this transfer is limited to audio files that you have recorded from analog sources.

## Streaming music from a PC/Mac/NAS (iTunes)

You can make use of connections between OPUS and other OPUSes, PCs or Macs in both directions. OPUS can play tracks stored in iTunes libraries on Macintosh or Windows Pcs, and the iTunes software can play the tracks of your OPUS. Obviously all music collections must be published for remote use to be able to take place.

Available additional music sources are displayed on the OPUS under the main menu option MUSIC SERVER, which only shows up if the OPUS finds any on the network, which means:

- the DAAP (iTunes) and/or UpnP/AV services are turned on in the OPUS network settings (default is on)
- they are connected to the network
- turned on
- they support the DAAP or UPnP/AV protocols
- their music libraries are published and open to be shared

Choose the one you want to listen from, and you should find the complete library of the remote OPUS/PC/Mac available right on your OPUS and with your OPUS controls! The screen header changes to reflect the name of the remote music server. Pressing the soft key LOCAL LIBRARY brings back the OPUS library and pushes the remote library away.

The other way round works also. E.g. in your iTunes window the OPUS should appear with its name in the list of libraries. Even your playlists are available. Now you can use the iTunes features to play and access the tracks of your OPUS (please note that iTunes does not support the FLAC audio file format). But the tracks always remain stored in the OPUS – if you want to access them, the OPUS must be turned on. It is also not possible to edit the tag information or playlists from remote PC/Macs. Apple's iTunes software is available for download at www.apple.com.

## 2.4  Editing Your Music Library

### Tag information / metadata on your OPUS – What's available

Tag information, also sometimes referred to as metadata or liner notes, is the information that goes along with the music file, that describes a music piece or album, which artist is playing, when the recording was made etc. This tag information will significantly enhance your knowledge of your music, and your pleasure of listening. Well edited, it will allow you to find particular songs or works so much quicker, as the OPUS has very powerful navigation options, which can only be as good as the data they have to work with.

Before getting into the actual editing of your tag information, it can be a good idea to check on what music is actually on your OPUS (you can do this anytime). On the top menu highlight LIBRARY, and then the soft key INFORMATION shows an overview of the number of artists, albums, songs and genres that make up your music library.

### Where you can find the tag information

To see the detailed tag information of a track or album just hit the soft key INFORMATION whenever you have one highlighted. Should you be navigating by artist or genre, the soft key INFORMATION will show the first album for that artist or genre. Here you can walk through in detail what tag information was added during the import process or subsequent editing.

### Editing the tag information

Sometimes the internal or internet CD databases don't offer tag information for your tracks, or they are in parts incorrect. You can then enter or change what is available to your liking, and there are two ways to do this:

- Using the buttons and jog-shuttle on the OPUS
- Using the RONDO browser to utilize your PC or Mac and the keyboard you have connected to them

In the following we will focus on the first alternative directly on the OPUS, a later section explores RONDO and how it is best leveraged for tag editing and other tasks.

Before starting you should decide whether you want to edit tag information for a single track or for a whole album (changing the tag information of a whole album has the advantage of applying your changes to all tracks at once), and use the jog-shuttle to navigate to the right one. As above, hitting the soft key INFORMATION will provide you with a view or confirmation of what is available, and then you move up and down the list of field with the inner jog-shuttle to the exact field you wish to edit.

1. Press the soft key CHANGE to bring up the screen to edit the field.



2. Use the inner disc of the jog-shuttle to select the character you want from the alphabetic list at the bottom, and choose it by turning the outer ring of the jog-shuttle shortly to the right.

3. Create the complete title using this technique. Soft key DELETE and soft key INSERT help correcting typos. When finished press soft key OK and you are back in the list of fields and the newly entered title is shown.

Here is a complete list of the fields the OPUS keeps for tracks and albums. Editing is done as above for all text fields, numerical fields work differently and are noted below:

- TITLE: Track title.
- ARTIST: Artist or band, sometimes the orchestra and conductor or even the composer, of the album or track.
- COMPOSER: This field is usually more important to fans of classical music, it will show who composed the particular piece of music.
- ALBUM: Album title.
- GENRE: Musical genre of the piece. A genre is assigned by choosing it from the existing genre list, or you can add your own genres by pressing soft key NEW. Sometimes you want to assign the same genre to one ore more artists. For this you need to select and mark one or more artists in the artist list and press soft key INFORMATION and make changes as outlined above.
- TIME: Depending on track or album view, the total time of the piece.
- DISC: Usually this field will show a "0", in multi-disc recordings or albums this field shows which CD is current, and tells OPUS to play disc 1 before disc 2 etc.
- TRACK: Number of the piece of music as part of a recording or album. You can change the playing sequence using this field.
- YEAR: Usually the year of the recording, or when the album was published.
- RATING: Your personal rating, which can be between 0 and 5 stars. The soft key "+" increases the ranking one star at a time, soft key "-" decreases it accordingly.
- PLAY COUNT: Number of times you have played this piece of music on the OPUS.
- DATE ADDED: The date when the particular piece was added to your music library.
- VOLUME: This field can be used to pre-adjust volume of a particular piece to make it play louder or less loud by increments of a decibel (dB). Default is no pre-adjustment.
- ENCODING: Here you can see what audio file format the track is stored in, which will

depend on how it was imported. If possible OPUS will offer to CONVERT it for you to the format that you have preset. There will be an additional prompt to make sure this is what you want to do, and then the track will be converted. The original file is replaced by the newly converted one, there is no duplication.

- BIT RATE: This is the number of bits that are conveyed or processed per unit of time, and so is quantified with kilobits per second (kbit/s). A higher bit rate means that the audio quality will likely be higher:
  - CD quality shows with 1411 kbit/s
  - FLAC as lossless compression has the same 1411 kbit/s
  - MP3 with highest quality has 320 kbit/s, down to 128 kbit/s with good quality
- SAMPLE RATE: The sample rate defines the number of samples per second taken from a continuous signal to make a discrete (digital) signal during recording. Here it is measured in hertz (Hz), with most CD recordings showing a sample rate of 44100 Hz.
- FILE SIZE: This field shows you the storage size of the track or album on your OPUS in megabyte (MB).
- COMMENT: Here you can enter whatever text you please as to the specific track or album.

## 2.5  Making the most of your Music: Play- and Searchlists

### Creating new playlists

With a playlist, you choose which tracks to play and the order in which to play them. You create a playlist with a name of your choice and assign tracks, albums, or artists to this list. You can create as many playlists as you want, include as many tracks as you want in each playlist, and rearrange the tracks in each playlist until the order is just right. You might have one playlist for exercising, one for a rainy day, another for dozing off in the night, and so on.

1. To get started choose the main menu option PLAYLISTS.

2. Press the soft key NEW and enter the name of your new playlist.



3. As with all text editing use the inner disc of the jog-shuttle to select a character from the alphabetic list at the bottom and choose it by turning the outer ring of the jog-shuttle shortly to the right. Soft key DELETE and soft key INSERT help correcting typos. When finished, press soft key OK and the new, empty playlist is created.

The process, as with the editing of the music library, is easier on a keyboard, so this is something you may prefer to do with the RONDO web interface (see later section).

## Adding tracks, renaming or deleting a playlist

1. 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 soft key MARK and turn the inner wheel to extend the selection to the last entry you want to include.

```
Olive Music            15 56    New
Good ol' Rock               ▶
                                Rename
                                Mark
                                Delete
```
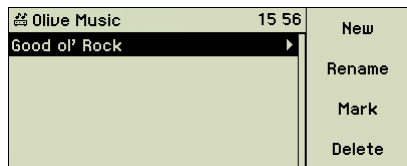
2. When your selection is fine press soft key 2 "Add to List". You will see the list of all your playlists. For your convenience the last used list is pre-selected as the target.

```
Olive Music            15 58    Add to List
Good ol' Rock
                                Mark
                                New
                                Delete
```

3. Choose the playlist you want your tracks assigned to, and press soft key ADD TO LIST. Now all your selected tracks are part of this playlist.

4. You can use the soft keys UP and DOWN to rearrange the position of tracks inside a playlist. Soft key MORE reveals further available options, such as being able to delete and add tracks. You may rename or delete an existing playlist any time by selecting it from the list and using the appropriate soft keys.

## Playback of a playlist

To listen to a playlist, just choose it from the menu option PLAYLISTS and press the play button.

## Creating a searchlist

Searchlists are special or smart playlists, which are dynamically generated each time you select them by search criteria you have previously defined. As such for instance you could have added new tracks to your OPUS that meet certain criteria of a searchlist such as a certain artist, and the searchlist will automatically show and play for you the latest result.

1. Choose the main menu option SEARCHLISTS.

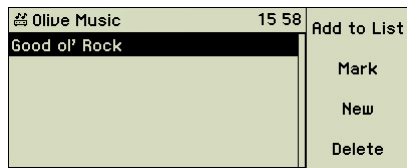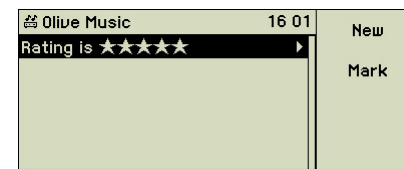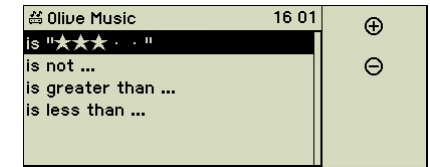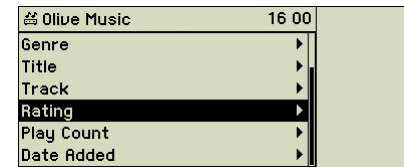2. Press soft key NEW and enter the name of your new searchlist.

3. Press soft key OK and the new, empty searchlist is created.

4. Press the soft key CHANGE to define the search criteria. Turning the inner wheel right, you are presented with the list of all tag information and all this fields are available for composing search criteria.

Example: To achieve a list that will always show your favorite songs you can use the field RATING and perhaps only allow songs, albums, and artists with a top ranking of five stars and in the Rock genre to be included:

```
Olive Music            16 00        Olive Music          16 01   ⊕
Genre                   ▶           is "★★★ · · "                ⊖
Title                   ▶           is not ...
Track                   ▶           is greater than ...
Rating                  ▶           is less than ...
Play Count              ▶
Date Added              ▶
```

```
Olive Music            16 01    New
Rating is ★★★★★              ▶
                                Mark
```

1. Navigate to RATING search criteria

2. Use soft key "+" to enter the number of stars. When the five stars have been entered, turn the outer ring of the jog-shuttle twice to the left, to get back two levels.

3. Now the first search condition is defined but you may also want to limit this playlist to only one genre of music. Again press soft key NEW and a second criteria appears, showing ARTIST CONTAINS by default. Follow the right arrow to the list of tag information fields, choose Genre and further to the right to the conditions.

4. Use soft key CHANGE to show the list of genres. The list displays all available genres including those without assigned tracks.

5. Choose one and confirm it pressing soft key OK. Now the definition of search criteria for the new searchlist is done. Turn the outer ring of the jog-shuttle once to the left to get back to the list of searchlists.

Whenever you are looking at the contents of this searchlist, you will see only Rock songs with the a 5-star ranking. In the course of the years you may change the tag information of tracks according to your changing personal preferences, this list will forever show your most valued tracks.

At any time you can edit, rename or delete a searchlist from the list by using the soft keys available.

## Playback of a searchlist

To play such a searchlist, just choose it from the menu option SEARCHLISTS and press the play button.

## 2.6 Connecting Your Portable Player / iPod

The USB ports on the back of your OPUS can be used for connecting a portable player or iPod, allowing you to play the tracks of the portable player via the OPUS, and even editing tag information and playlists. After a portable player is plugged in, OPUS looks at it like a music CD, and it appears with its own name as a new entry in the main menu.

Please note that results can vary, as e.g. recently released iPods have made compatibility difficult. We'll continue to invest in this area and make software updates available over time to keep compatibility with industry standards and devices high.

### Playing music off your portable player

Press the soft key INFORMATION to get a statistical overview of your portable device. Behind the menu option of the portable player you will find a complete menu containing SONGS, ARTISTS, ALBUMS, GENRES, and PLAYLISTS of the external device. Navigating this menu does not present you with any surprises, as it is the same that you are already used to. Every time the menus of the portable player are selected, the name of the external device appears as header in the display, so you always can tell which music collection your are looking at right now.

Note: Due to Apple's new policy their latest generation iPods (2007-09) are only compatible with Apple® iTunes™, and therefore are not supported by our pure audio systems.

### Copying tracks to a portable player

1. Choose the tracks you want to copy using the usual OPUS LIBRARY options. The menu option MARK lets you select more than one item of a list.

2. Then press soft key ADD TO LIST and the list of playlists is displayed.

3. In addition to your own playlists the name of the portable player itself is displayed as a "playlist" here. Select this special playlist and press soft key ADD TO LIST to transfer the tracks to the external player.

### Eject your portable device player

Caution: You need to press the soft key EJECT on the OPUS before unplugging the portable device to avoid data loss on either your portable player or the OPUS.

## 2.7 Enjoy Music With Friends and Family

### Streaming Music to Other Rooms

Besides connecting to other PC or Macs, OPUS is designed to provide music streams to UPnP/AV clients throughout your home or property. These are devices such as boxes or other radios or amplifiers that are able to receive music from a server in a streaming mode. The communication between such clients and the OPUS server is organized by the UPnP/AV protocol, which is an industry standard. The UPnP/AV server inside the OPUS is based on the technology of TwonkyVision GmbH (www.twonkyvision.com), and all clients compatible with a TwonkyVision UPnP/AV server can be used.

OPUS and the clients can be connected by standard Ethernet cabling or by a wireless network. The network must be enabled as well as the UPnP/AV network service (see the Network Settings section of this manual for details on how to do this, default is on).

### Burning a CD

1. Choose an album or collect some songs into a playlist. Select the album or the playlist and press the record button.

2. OPUS sums the length of the tracks and warns you if the total playing time exceeds the capacity of a CD-R.

3. OPUS will then ask you to insert a fresh CD-R into the CD slot. After confirming with soft key OK the burn process starts.

4. After completion the newly burned CD is ejected.

### Copying a CD

1. After inserting a music CD, its title is shown as the topmost entry of the main menu.

2. Press the soft key COPY to copy all tracks of the CD onto a second one.

3. OPUS reads all tracks off the music CD and then asks you to insert a fresh CD-R into the CD slot. When a CD-R has been inserted, the CD burning process begins.

Please note that duplication of copy-protected audio CDs may infringe copyright and digital rights laws of your country.

## 2.8  Other OPUS Access Points: Remote Control and Web Browser

### Remote Control

The remote control is a good way to control the functions of OPUS from a short distance such as a couch. Its keys duplicate the functions of the buttons on the front panel so there should be no surprises. The following illustration shows a drawing of the front of the remote control.

- The On/Off button, the CD control elements and the function keys (F1-F4) have the same functions as the corresponding buttons on the front panel of OPUS (except fast forward and rewind).

- Numerical keypad: Here you can pick an individual track of an album or playlist directly by its number.

- MENU: A shortcut to the main menu of OPUS. Press this button twice to increase the size of the text displayed to "couch view".

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

- Navigation: Similar to using the jog-shuttle you can navigate through the menus of OPUS using these keys. The centered "OK" key is equivalent to the upper soft key, which almost always confirms the chosen action.

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

- Brightness: Adjusts the level of the background lighting of the keys.

- Shortcuts: The bottom 8 buttons allow you to shortcut to the named menu section from wherever you are. SOURCE is temporarily unused. INFO will either show the music library statistics, or during playback the track tag information.
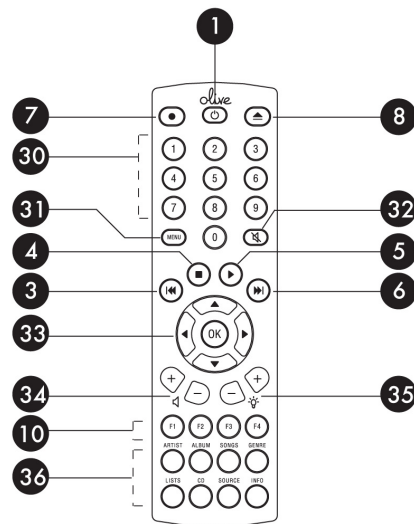
| 1  On/Off | 30 Keypad |
| 3  Previous track | 31 Menu |
| 4  Stop | 32 Mute |
| 5  Play/Pause | 33 Navigation |
| 6  Next track | 34 Volume |
| 7  Record | 35 Brightness |
| 8  Eject CD | 36 Additional |
| 10 Function keys | function keys |

### The Olive RONDO™ Web-Interface

An innovative and fun way of controlling your OPUS and music library is by using the RONDO web interface. As a user interface it is larger, has color, and is more flexible than the screen on the OPUS. It makes use of your OPUS being part of the home network, and communication being based on industry standard protocols such as in this case TCP/IP. The main use cases currently are:

- managing the tag information of your music library on a connected computer with a larger screen and keyboard, and

- controlling your OPUS with an internet-able smartphone or PDA that has a large and/or color screen and allows to see the cover art of albums being played

Here we will focus on how to manage tag information of the OPUS using a web browser instead of operating the jog-shuttle on its front.

1. Launch the web browser of your choice.

2. As URL (address) enter the IP address of your OPUS. OPUS displays this address in SETTINGS & SPECIALS > NETWORK > soft key INFORMATION. If the OPUS is configured as "Olive Music Network" you can enter the IP address "192.168.72.1" or simply "http://OPUS".

The RONDO home page of the OPUS appears.

Take a look around, there are four areas to note:

- At the top left you can choose between "Player" and "Browser" mode. This allows you to toggle between seeing and controlling what is currently being played – including the album artwork if it is available, and browsing and working on your music library.

- The top right lets you influence a number of settings directly, including random and repeat play modes, volume and screen brightness, a "Styleswitcher" where you choose the style appropriate to the web browser device you are using, and help and service links.

- The left panel which allows you to track how you have navigated into your music library, and lets you skip back to any level including the main menu whenever you like. You'll notice the menu structure is just the same as on the OPUS screen.

- The right panel where most of the action takes place. Here you can drill down further by clicking on the different items like LIBRARY, ARTISTS etc., or you can perform specific functions, e.g. such as starting play for the whole library or internet radio, or editing a certain item. Once you are in a longer list of e.g. artists, the alphabet appears along the top part of this section to allow you to jump to a certain artist you are looking for by the first initial.

- INFORMATION: To view the available tag information for the relevant item. From here you can drill down further to an even more specific item, if e.g. you are looking at an album.

- ADD TO LIST: To add the selection to a playlist

- CHANGE: To edit the fields for the item that is currently selected. If this is an album, changes you make will apply to all tracks in that album.

## Editing data



When you click ARTISTS the list of stored artists is displayed. The small icons attached give you the option of editing or playing the entry. After clicking the editing icon you are presented with a popup that gives you the following options:

# 3 SETTINGS AND SERVICING

## 3.1 General Settings

### Customizing the OPUS to suit your needs

Following the main menu option SETTINGS & SPECIALS you will find numerous settings to adapt your OPUS to your needs and tastes, which we strongly encourage you to do. First the GENERAL SETTINGS, try out which option suits you best!

- SOUND: VOLUME LINE OUT: Due to the focus on disk quality audio the feature is disabled on the OPUS N°5

- PLAY MODE: Here you can control the behavior of OPUS when playing songs.

    - If RANDOM mode is turned on, tracks of the selected artist, album, or another selection are played in random order.

    - If REPEAT mode is turned on, OPUS 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.

    - AUTO PLAY AUDIO CD: OPUS can automatically start the playback when a CD is inserted, or it waits for you to press the play button.

- APPEARANCE (Display): Here you control the OPUS display and buttons:

    - CONTRAST of the OPUS display and BRIGHTNESS of the display and control buttons.

    - CLASSICAL MODE: Fans of classical music will appreciate being able to search their music by composer. When this mode is turned on, COMPOSERS is added to the LIBRARY view in addition to ARTISTS, ALBUMS etc. to drill down by.

    - SMALL LETTERS: If your eyes are in good shape and you are close to the display, this setting lets you see more letters per line and more lines per screen, and long song titles or names of artists can be seen complete.

    - TRACK NUMBERS lets you configure the display below the track progress bar. Remaining playtime, current track, number of the tracks of the playlist or alter natively remaining playtime, total playtime, and elapsed time of the current track.

    - SPECTROGRAM: Set on, the display shows the banded frequency levels during playback of songs.

    - LARGE PLAY VIEW AFTER: The OPUS features the "couch view", so that once you have chosen a track or album with more detailed information, the display can switch to a larger play view after a given time interval. This larger play view shows the track title, artist, and play progress in large letters.

- DATE & TIME: You set the internal time and date of your OPUS here. This may be necessary to adjust to daylight-saving time or if the OPUS has been unplugged for a longer period of time. Use the inner wheel of the jog-shuttle to set the digits, a right turn of the outer ring to move the cursor to the next field. You can also set the time to a specific time zone or to auto set via your network connection.

- PREVENT CHANGES: Turn this on to protect your music and tag information from unintended changes/editing. Be aware that changes to your settings are still possible.

- LANGUAGE: Choose the display language here (English, German and French are available). Press the appropriate soft key, the display changes immediately.

### Importing from CDs and burning CDs

Under IMPORT & BURN the OPUS allows you to manage the major import and export functions of the OPUS. An important aspect here is in which audio file format you are storing your music, which you control with the setting for COMPRESSION. The type of encoding defines quality, size of the stored data and compatibility in various respects, e.g. concerning your portable device and which formats it can play. There are many articles on the internet and books that cover this issue in detail.

The OPUS offers many different formats, the default import format (ENCODER) is set to "MP3" and the default DATA RATE is set to HIGH, an equivalent to 160 kbit/s (CD QUALITY is equated with 320 kbit/s, HIGHER with 192 kbit/s and GOOD to 128 kbit/s). Additionally the MP3 format files can be encoded using Variable Bite Rate (VBR), which varies the amount of output data per time segment, with a higher bitrate allocated to the more complex segments of the track and less space allocated to less complex segments. The average of these rates is calculated to produce an average bitrate for the file that will represent its overall sound quality.

To achieve the best quality music we suggest to import music at no compression (either AIFF or WAV), or with lossless compression (FLAC) which retains the audio quality at about half file size which is a good compromise. Higher quality always means that each track needs more space on the internal OPUS storage. The following table shows roughly how many music CDs can be stored on an OPUS, depending on the encoding used for the files. An average music CD stores about 60 minutes of music, and the available space of an OPUS system is calculated from the capacity of the internal hard disk minus 3 GB needed for the system files and the database.

| Format | | Quality | 400 GB | 500 GB | 750 GB |
|---|---|---|---|---|---|
| RAW (AIFF/WAV) | | No compression | 660 | 821 | 1,233 |
| MP3 | good | 128 kbit/s | 7,230 | 9,048 | 13,599 |
| | high | 160 kbit/s | 5,780 | 7,238 | 10,879 |
| | higher | 192 kbit/s | 4,820 | 6,032 | 9,066 |
| CD quality | | 320 kbit/s | 2,890 | 3,619 | 5,439 |
| FLAC | | Lossless compression | 1,150 | 1,448 | 2,176 |

With CD BEHAVIOR you can tell OPUS what to do in regards to CDs that you put in, especially in view of making it easier for you if you are doing a lot of importing:

- PLAY WHILE IMPORTING: Listen to the CD while importing or not.
- ON AUDIO CD INSERT: Decide whether on inserting a music CD it should always be imported (IMPORT SONGS) and ejected after the import is completed (EJECT AFTER IMPORT).
- CD RECOGNITION: Depending on the type of CDs you are inserting, AUDIO CDs or DATA CDs, you can set this parameter. We suggest you leave the setting at AUTO-MATIC, which should work best across all your CDs.

## Analog recording

This feature is disabled on the OPUS N°5.

## Burning to CD

You have a number of options when burning a CD:

- DISC FORMAT: Choose in which format you would like the end product, likely depending on where the CD is to be used:
  - AUDIO CD: This is the standard quality CD format that any CD player should be able to read, and OPUS recodes any files chosen to the CD-A file format.
  - MP3 CD: Here the result is a CD with MP3 files on it, files chosen that are not in the MP3 format are ignored.
  - DATA CD: In this case a CD is generated which computers can read and where the audio files are left in the form they are in, e.g. in FLAC, MP3 or WAV form.

  For MP3 and Data CDs you can further determine that folders with artist and album titles are created during the burning process.
- SPEED: The Speed option lets you choose between a safer or faster burning. The setting SECURE leads to an 8x speed and the best quality burn, and the setting FAST burns at up to 24x speed.
- GAP BETWEEN SONGS: You can define the length of the gaps between songs in seconds.
- CREATE CD-TEXT: Some CD players can read tag information off CDs, and if you set this option to on, you will be embedding the tag information that belongs to your audio files onto the burned CD-R.

All CDs that you create will be remembered by your OPUS for the future, i.e. their tag information is added to the internal CD reference database so that album title and other fields will show up whenever you re-insert the CD.

## Massaging your music output with dynamic range compression

Under natural conditions, ears can hear soft sounds in a quiet environment, but not in a noisy environment. E.g. in a moving car background noise can overpower soft sounds, but simply turning up the volume would make the loud parts uncomfortably loud. Dynamic range compression is a process that manipulates the dynamic range of an audio signal by increasing the volume of both the soft and loud parts of sound, though the soft parts are increased more than the loud parts. The overall effect is that a compressor makes softer sounds relatively louder and louder sounds seem relatively softer in comparison. So should you be using the OPUS in a noisy environment, this feature is great for you, it is most often used in public areas, like restaurants, hotels, etc., to accommodate the guests.

This setting is enabled or disabled for all tracks of the music library centrally following the path SETTINGS & SPECIALS > GENERAL SETTINGS > SOUND > DYNAMICS COMPRESSION. There are four modes available:

- OFF: Pressing the relevant soft key switches dynamics compression off.
- NIGHT MODE: This setting is recommended for quiet environments, like listening to music in your apartment while showing consideration for the sleep of your neighbors.
- LOUD ENVIRONMENT: This setting should be used in places with lots of environmental noise.
- EXPERT MODE: Here acoustics experts can fine tune the parameters of dynamic compression parameters by themselves. 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:
  - METHOD: This method defines how the transition between compression and non-compression is done. SOFT KNEE is recommended for instrumental sound, HARD KNEE for voices, suppressing "pop" sounds in talking and singing.
  - THRESHOLD: This is the trigger level for the compression, it can vary between −60 and −6 dB.
  - RATIO: This setting defines the magnitude of the compression, the relation between input and output level. E.g. a ratio of 4:1 means that an increase of 100% of the input level beyond the threshold only leads to a 25% increase of the output level. The ratio can vary between 1 and 6.
  - ATTACK: This determines the interval the compressor waits until it reacts. This interval should be not to short, to avoid pumping effects. Attack can vary between 1 and 50 ms.
  - RELEASE: This sets the interval the compressor should go on after the input level falls below the threshold. Higher values of release give you smoother transitions. Release can vary between 0.1 and 1 second (s).

## 3.2 Network Settings

A stand-alone OPUS is great for archiving and listening to music. But as a member of a home network with additional clients or connected music servers or PCs it can do much more. Your OPUS is fully enabled for wireless or wired communication. Before getting started please make sure that the network settings of all other devices such as Pcs/Mac are set to "Obtain an IP address automatically" or "DHCP". This is especially important if you are using a portable computer alternately at home and at the office and its networking settings is configured automatically at the office.

The following settings define OPUS' properties for integrating with other computers in a local area network, wired and wireless.

### Connection Ports

The antenna for wireless communication (WLAN) is on the back of the OPUS, the plugs for Ethernet cabling beneath.

- OPUS provides four 10/100BaseT Ethernet ports on its back, 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.
- OPUS 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). Depending on the mode OPUS is configured to it is acting as a WLAN client or an Access Point.

### Network Configuration

As part of the SETTNGS & SPECIALS > NETWORK menu, you manage the CONFIGURATION if your OPUS as part of your home network. In difference to the other settings, as added safety after every change of the network configuration you must confirm them so they are activated. You activate the new settings by pressing the soft key ACTIVATE as part of the NETWORK menu:

- MODE: OPUS allows you to choose from these three operating modes:
  - OLIVE MUSIC NETWORK: OPUS acts as central switch, optional WLAN Access Point, and DHCP server of the network (according to RFC 1918). It provides a DHCP service and distributes IP addresses to connected devices out of 192.168.72.0/24 range. The chosen settings must correspond to those used by the other computers as they communicate with the OPUS.
  - HOME NETWORK: A working local area network already exists and the OPUS should act as a DHCP client and search the existing network for settings. Settings on the OPUS must correspond to those of the existing home network for communication to function properly.
  - EXPERT MODE: As above with the home network, with the difference that you enter the IP configuration manually.
- WLAN: For all modes the WLAN function can be enabled/disabled separately.
- NETWORK CONNECTION (only expert mode): Here two modes can be chosen:

- ETHERNET: The manually defined IP address is used for both Ethernet and WLAN and all ports are connected by port switching. Concerning the WLAN OPUS is an Access Point.

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

- IP ADDRESS (only expert mode): IP address, subnet mask, router address, and name server address are entered manually.

- WEB PROXY: If you are using a proxy server to connect to the Internet, you can configure its address here.

- NETWORK NAME: This depends on the above chosen networking mode:

  - If your OPUS is configured as "Olive Music Network", you create a new name for the network. Other devices will have to use this name to access your wireless network. For easy cross-platform access we recommend that you do not use spaces or special characters for the network name.

  - If your OPUS is configured as part of an existing "Home Network", either perform a SEARCH using the soft keys, or select CHANGE to manually enter the network name of your existing network. If manually entering the network name, make sure the spelling and casing matches your network name as displayed by your computer.

- PROTECTION: To protect the WLAN access OPUS supports the Wired Equivalent Privacy (WEP) and Wi-fi Protected Access (WPA) protocols, please choose the one that is best for you.

- KEY: For security keys are exchanged between client and central switches to establish identity and secure communication. OPUS supports WEP keys 64 and 128 bit WEP encryption. 24 bits of the encryption are used as initialization vector, so sometimes these keys are said to have 40 bit and 104 bit encryption. Your WEP key must be in hexadecimal form in order to connect to your home network – ASCII will not work in Home or Expert Mode. Hex key examples are:

  - 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 obtain valid WEP keys OPUS provides a special edit field. Only valid characters and digits are available. Additionally a random key generator lets 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 jog-shuttle you can change it as you like.

WPA keys are always ASCII and can be 8 to 64 characters long.

## Network Services of the OPUS

Under NETWORK > SERVICES, you can enable and disable different network services, depending on your home network and the technology used by the computer or streaming clients you are connecting to. For security reasons we recommend to turn these services off unless you actively need them:

- WEB INTERFACE: To access the OPUS through the RONDO web interface.

- UPNP/AV: To allow access from a UPnP client.

- SEARCH FOR UPNP/AV: If OPUS is to serve as a UPnP client, meaning that Olive acts as control point and player to a UPnP server that it is connecting to, this search should be enabled, and any such servers will then be listed on the main menu under MUSIC SERVER ready to be accessed.

- ITUNES (DAAP): To allow access to and from an iTunes application.

- TELNET: This access allows a computer expert to perform a remote error search in case of a more serious system issue.

- VNC: VNC stands for Virtual Network Computing. Here you allow remote control software to view and fully interact with your OPUS.

- UPNP/AV REMOTE CONTROL: If you want to use a UPnP capable remote control you should enable this setting.

## CD recognition (CD Database)

Under NETWORK > CD DATABASE you control if your OPUS should make use of the online Olive CD reference database.

- ONLINE ACCESS: Toggle to turn this feature on or off. We suggest to leave this on.

- SERVER URL: Here you could change the URL of the online database should it change in the future or if the server provider decides to change the web address. The access uses HTTP port 80.

If the online access to the Olive CD database fails, perhaps because the network is not functional at some point, OPUS automatically uses its internal database for retrieving the CD tag information.

## 3.3  System Servicing

### Information about your OPUS

Information about your system is available under SETTINGS & SPECIALS > OLIVE MUSIC INFORMATION, showing you:

- DEVICE NAME: Here you see what your device is called within a network. Press soft key CHANGE to edit the network name of your OPUS here.
- VERSION: This shows your version of software. The soft key SOFTWARE UPDATE allows you to check online if a newer version software is available, and to download and install it. After successfully updating the software OPUS has to be restarted. This happens automatically after displaying a short notice. Then all the new features are available.
- SERIAL NO: The device serial number. You need it e.g. for registering your OPUS.
- DISC SIZE: The total hard disk size.
- FREE SPACE: The available space as a percentage of the hard disk total.
- CD DATABASE: This date shows the version of the internal CD reference database.

Information about your network and the currently used IP addresses can be displayed under SETTINGS & SPECIALS > NETWORK and using soft key INFO.

### Simple service functions

Performing software updates, returning the OPUS system to the factory settings, or moving towards more technical maintenance functions is done by following the path SETTINGS & SPECIALS > SERVICE:

- SOFTWARE UPDATE: For the latest online update press the soft key and the OPUS will guide you through this procedure as outlined above under "Information about your OPUS".

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

  1. Start with downloading 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 self-made CD or a Service CD of Olive the system software of the OPUS can be updated.
  4. Switch off the OPUS by pressing the On/Off button for about 2-3 seconds until the "curtain" starts closing, then release it.
  5. Switch OPUS on by pressing the On/Off switch while holding down the play button until OPUS's display shows three CD icons and the OPUS icon.
  6. Insert the CD into the slot. Please note that OPUS waits only about 10 seconds

for a CD. Then OPUS starts using the operating system of the CD and the update procedure is launched automatically.

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

  At the first launch of the new software version, the maintenance function SEARCH NEW META INFO (see below for details) is started in order to fill the tag information of new fields that may have been added as enhancements, e.g. COMPOSERS etc. A progress bar shows how long this operation is taking, which can be a few minutes.

- FACTORY SETTINGS: Using this menu option you can restore all settings back to their default values. Warning: This affects all parameters of the SETTINGS & SPECIALS menu. Your imported music and tag information however are not affected by this command.

- MAINTENANCE: The following functions allow you to work on existing data on your OPUS. Please read carefully what each function does before deciding to proceed:

  - RECOVERY: As a security feature the OPUS duplicates your music library / metadata information on every startup of the system. Here you will find a list of the 20 most recent backup files. As such it is possible for you to go back to a previous version if you so wish. Select the version that you want and press the soft key RESTORE. Use the soft key DELETE to save disk space and remove backup files you do not need.

  - CHECK LIBRARY: Songs which are named in the library but do not exist on the hard disk are deleted from the library. The file structure is updated at the same time.

  - CHECK MUSIC FOLDER: All files of the music folder are checked on entry in the library. Files not listed in the library are moved into the import folder.

  - SEARCH NEW META INFO: Meta information (ID3 tags) of each music file is read; empty fields of the library are filled in (existing information (field not empty) is not overwritten). Recommended if music files have been generated on a computer and then copied to your music server.

  - READ ALL META INFO: Meta information (ID3 tags) of each music file is read, information already contained in the library is overwritten. As a consequence, customized adjustments of information are lost.

  - WRITE ALL META INFO: Meta information (ID3 tags) of the library is written in each file. Recommended if music files have been exclusively imported from a CD to your music server.

During the maintenance operations CHECK LIBRARY and CHECK MUSIC FOLDER a text file "maintenance.txt" is written to the import folder. It contains the list of songs deleted from the library and moved to the import folder for your information, and can be viewed on your networked computer as a .txt file.

## CD Reference Database Update

Currently there is no way to support an update of the internal CD lookup database with an online link. You should inquire online or with the Olive support personnel about our current offering of update CDs.

## Backup (copy to an external HD)

It is possible to back up the imported data to an external USB device, however before you do you need to check the legality of this in your jurisdiction, as this may be considered as another copy to an already existing one. Proceed as follows:

1. While the OPUS is turned on, connect an external hard disk to one of the USB ports on the back of OPUS. The OPUS will recognize the hard disk and display its name as part of the main menu. Note that the hard disk needs to be formatted in FAT32, EXT3, UDF, or HFS format for this to work.

2. Mark the music that you wish to back up. You do this just like building a playlist by going into the LIBRARY, choosing e.g. ALBUMS, pressing the soft key MARK, and then selecting part or all of the list of albums.

3. Press the soft key ADD TO LIST to select a playlist or in this case the backup hard disk that you are adding to. Select your hard disk and press the soft key ADD TO LIST.

The backup may take a significant amount of time depending on the size of the disk, up to five or six hours. No music CDs can be imported at this time and the analog recording is disabled, you can though listen to music.

If you only want to safeguard the tag information, the OPUS offers the RECOVERY feature as described above.

## Restore (copy from an external hard disk)

Just do the reverse of how you originally backed up your OPUS:

1. Connect the external hard disk to the OPUS. Once it appears on the main menu (above LIBRARY), go into it. It should have an alphabetical list of songs.

2. Starting with the first song highlighted, hit MARK and then scroll to the bottom of the list. Sometimes it may be slow to highlight each song, so be patient.

3. Finally, once you have the last song highlighted, hit the soft key IMPORT. The files will be copied back to the internal hard disk. Depending on how many files there are, it may take a while.

# 4 TIPS AND TROUBLESHOOTING

## Know more about your OPUS system

If you want to know about your system, at anytime you can go to SETTINGS & SPECIALS > OLIVE MUSIC INFORMATION to find out about what your device is called, your version of software, the serial number, hard disk size etc.

## Icons used

Here is the list of icons that is used in the top part of the display:

| | | |
|---|---|---|
| | Steady | The OPUS icon shows that the main menu is referring to the music library located on OPUS. |
| | Flashing | OPUS system is busy with complex operation, e.g. with the coding of music files. |
| | Animated | A music CD is currently played back. |
| | Animated | OPUS is currently encoding music tracks, e.g. from a music CD. This action is done at 3x speed. The encoding for one hour of music lasts about 20 to 30 minutes, whereas the import of the music tracks is completed within 10 minutes using 10x speed. During this encoding, you can continue to import more CDs and the OPUS will do the encoding in the background. |
| | Animated | OPUS is currently burning the chosen tracks on a music CD. |

## Useful key combinations

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

| | | |
|---|---|---|
| | | Icons of three CDs and the OPUS logo are displayed. You can insert a recovery, update, or service DVD. Please note that OPUS waits only about 10 seconds for a CD. Then OPUS starts using the operating system of the CD. |
| | | The CD in the CD drive is ejected. |
| | | All pending tasks of your OPUS are stopped: Importing or encoding of music, the iTunes cache is cleared and a connected iPod is treated as newly connected. |

## Take it easy with the power cable

In normal operation please never unplug your device while it is turned on or in sleep mode. It might damage your device.

## CD handling precautions

- Handle discs carefully - grab the outside edges of the disc instead of the top/bottom surfaces so as not to damage or scratch the front side.  Always keep the disc 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 OPUS is located.

## The OPUS shows no reaction

If pressing buttons or turning wheels does not produce any reaction of your OPUS, please try these first aid measures:

1. Press the Power On/Off button on the front of your OPUS for about 4-5 seconds. OPUS should now be switched off. Wait a few seconds, then press this button again to switch the OPUS 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.
2. Unplug OPUS's power cord from its AC outlet. Wait a few seconds and plug it in again. Now press the On/Off button on the front of your OPUS. 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 don't do the trick, please follow the instructions of the next section.

## Recovery DVD

The OPUS shipment contains a Recovery DVD, which can be used to restore the operating system software to an OPUS. Please note that in very few extreme cases, this process can lead to the loss of your music files as well as the accompanying tag information!

1. Power off the OPUS using the button, or by unplugging the power cord.
2. Switch OPUS on by pressing the On/Off switch while holding down the play button until the OPUS display shows three CD icons and the OPUS icon.
3. Insert the Recovery DVD. Please note that OPUS waits only about 10 seconds for a CD before attempting to start up from its internal system. The OPUS will now start up using the operating system of the CD.
4. Choose the display language.
5. The display will show the following four options:
    - DELETE: The OPUS will be forced to the factory settings. Everything, including music and data is deleted. After this process OPUS is fresh out of the box.
    - RECOVERY: Only the operating system is restored. Music files and tag information are not touched. If this option fails, or shows error messages, or in any other respect did not complete smoothly, you will have to choose the DELETE option for recovering.
    - REBOOT: Cancel the recovery process of the recovery DVD and restart OPUS in the normal way.
    - POWER OFF: OPUS is switched off.
6. Press the appropriate soft key and the chosen process starts, showing status messages during progress.
7. On successful completion OPUS shows a message on the display and can be restarted in the normal way.

# 5 FURTHER RESOURCES

There's more information about using OPUS available on the web. Please check the following table that describes where to get more OPUS-related software and service information.

| Topic | Do this |
|---|---|
| Latest user manuals, FAQ, tips & tricks, software downloads | Go to www.olive.us and navigate to "Support" |
| OPUS service & support | care@olive.us |
| | Tel.  +1 415 908 3870 |
| | Fax  +1 415 908 3932 |
| The latest information about OPUS | Go to www.olive.us and select "Products" |
| Any other question you may have about the OPUS | connect@olive.us or call us at 415.908.3870 |

# 6 SAFETY AND CLEANING

## Important Safety Instructions

1. OPUS is designed for recording and playing back encoded digital audio signals and for the burning of audio CDs. Any other usage is explicitly excluded.

2. Install this unit in a well-ventilated 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). Place the unit on a secure, level surface and do not put any heavy objects on its top.

3. To prevent fire or electrical shock, do not expose the unit to rain or water. Do not use this product near water – for example near a bathtub, washbowl, kitchen sink, or laundry tub; in a wet basement or near a swimming pool and the like.

4. Avoid sudden temperature changes. Condensation water may be created inside the device while 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 any CD 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 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. Do not use attachments not recommended by Olive as they may cause hazards.

6. Before plugging your unit into the AC main supply, make sure that the voltage indicated at the back of the unit complies to the local main voltage. 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 and should only be used as stated.

7. 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. To prevent lightning damage, disconnect the AC power plug when there is an electrical storm. In doing so, always grab the plug, never the cable itself.

8. This unit is not disconnected from the AC power source as long as it is connected to the wall outlet, even if the unit itself is turned off. This state is called  "standby". In this state, the unit is designed to consume a very small quantity of power. The unit is not to be disconnected from the power source if it is in standby, as doing so may damage the OPUS.

9. For your own safety do not attempt to open the case of the OPUS, or disassemble it. You run the risk of electric shock and voiding the limited warranty. No user-serviceable parts are inside. Never push objects of any kind into the product through openings as they may touch dangerous voltage points that could result in fire or electric shock.  Never spill liquid of any kind on the product. Contact Olive support if something drops into the case.

10. Damage Requiring Service – Refer all servicing to qualified service personnel. Servicing is required when the unit has been damaged in any way or the unit does not operate normally. Be sure to have read the "Tips and Troubleshooting" section regarding common operating errors before concluding that the unit is faulty.

## Cleaning

Use a clean, soft and dry cloth. Make sure to unplug the product from the wall outlet before cleaning.

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.

# 7 REGULATORY AND ENVIRONMENTAL COMPLIANCE

## 7.1 Legal Notices

### Music is Intellectual Property

Intellectual property, including music, is subject to worldwide copyright protection. In most countries it is permitted to make a copy of a sound storage medium (e.g. CDs) that has been legally acquired or of music data (e.g. from the Internet) for personal use, except for CDs with copy protection. In no case is it permitted to offer these copies for commercial sale or to pass them to third parties. Always make sure that the music you acquire is properly licensed, i. e. that the party offering them also possesses the rights to the titles being offered. Please note that recording music cassettes, vinyl records or CDs may injure copyright.

This equipment must not be used for unauthorized duplication of CD's 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.

### Data Loss

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.

Manual Disclaimer

At the time of printing, the screen shot images in this manual matched this 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.

### Trade- and Servicemarks

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, see www.twonkyvision.com for details.



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

Supply of this product does not convey a license nor imply any right to distribute content created with this product in revenue-generating broadcast systems (terrestrial, satellite, cable and/or other distribution channels), streaming applications (via Internet, intranets and/or other networks), other content distribution systems (pay-audio or audio- on-demand applications and the like) or on physical media (compact discs, digital versatile discs, semi-conductor chips, hard drives, memory cards and the like). An independent license for such use is required. For details, please visit http://mp3licensing.com

Supply of this implementation of AAC technology does not convey a license nor imply any right to use this implementation in any finished end-user or ready-to-use final product. An independent license for such use is required.

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

## LPGL Library + GPL Package Written Offer

This product contains Linux 2.4.26, which 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.

## Olive Limited Hardware Warranty

Olive Media Products, Inc. ("Olive") warrants this hardware product against defects in materials and workmanship for a period of:

- OPUS No 3: one (1) year from the date of delivery.
- OPUS No 5: two (2) years from the date of delivery.

If a defect exists, Olive will, at its option:

- Repair the product at no charge, using new or refurbished replacement parts, or
- 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, while the replaced item becomes Olive's property.

Following exclusions and limitations apply:

- 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 an 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 AND 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 OF 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.

## Copyright

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.

3rd edition Olive Media Products, Inc.

© August 2007

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

Email: connect@olive.us
http://www.olive.us

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

## 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 a minimum distance of 8 inches 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 of 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 my 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
- This device must accept any interference received, including interference that my cause undesired operation.

CAUTION

- Use of controls, 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. Due to possible eye injury, only a qualified person should remove the cover or service the device.

CLASS 1
LASER PRODUCT

## 7.2  Environmental Compliance

### Disposal and Recycling Information

Your OPUS must be disposed of properly according to local laws and regulations. When your OPUS reaches its end of life, contact your local authorities to learn about recycling options.

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.