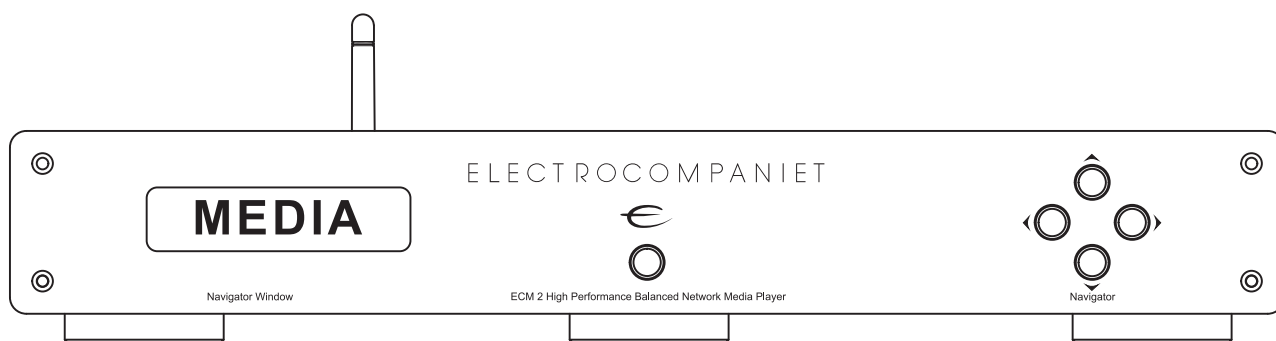




ELECTROCOMPANIET
If music *really* matters™



ECM 2

High Performance Balanced Network Media Player
(with integrated DAC and Streamer)

Owner's Manual

Version 1.1

EN

ENGLISH

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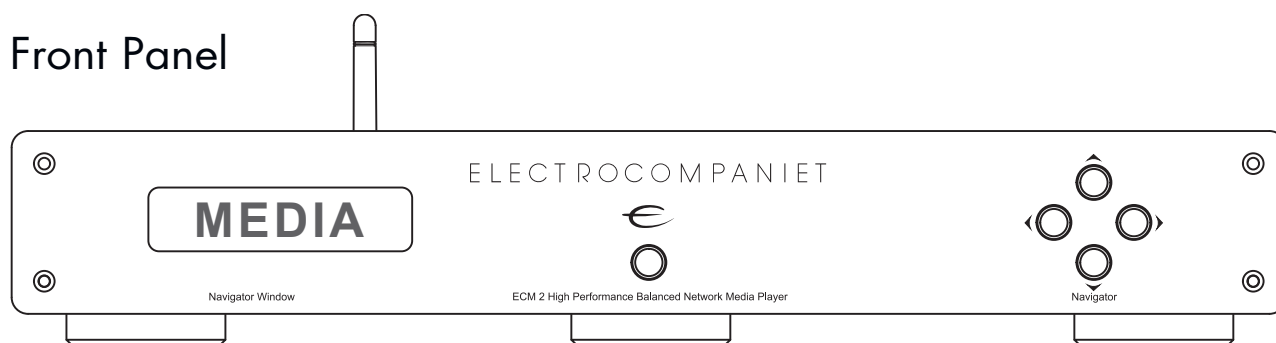
Warning:

To avoid risk of fire or electric shock, do not expose this appliance to rain or moisture. Verify line voltage before use. Do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel. The warranty is void if the product is tampered with by non-authorized personnel. Use only authorized Electrocompaniet service center.

The contents of the carton

- 1 pc. ECM 2 Balanced Network Media Player
- 1 pc. AC main cord.
- 1 pc. Antenna for wireless network.
- 1 pc. IR Remote control
- 2 pcs. Batteries for remote control
- 1 pc. Quick start guide
- 1 pc. CD with the owner's manual
- 1 pc. Inspection card

Front Panel



The front panel display will show the currently selected user mode of your ECM 2 Network Media Player. The different user modes are:

MEDIA: Your ECM 2 is in MEDIA mode. In this mode your ECM will act as a multiformat network media streamer and player. Use this mode to play music, watch videos or TV series. (Refer to the Home screen, the Screen navigation and the Playback sections for detailed instructions on how to operate your ECM in this mode.)

COAX1/COAX2/TOSLINK1/TOSLINK2:

The ECM 2 is in DAC mode and the active/selected input is indicated in the front panel display. In this mode you can listen to connected digital audio sources to take advantage of the High End digital to analog converter built into your ECM for optimal audio quality.

Status display mode

The display mode shows the volume setting and sample rate for the selected input. The display enters into "status" mode when the volume is operated or when there is a change in input selected or the sample rate. After 5 seconds, the display will revert back to the INPUT mode.

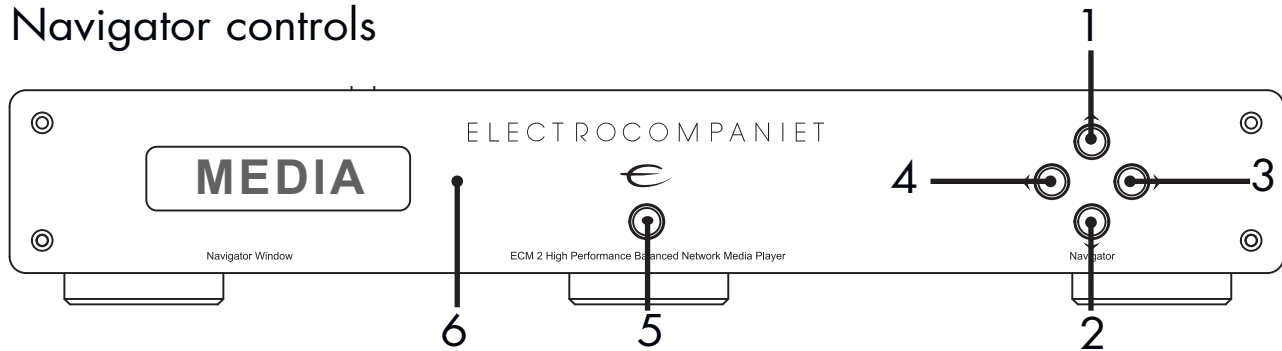
In "status" mode the following information is displayed:

The first part shows the current sample rate at the input and the last number shows the volume setting. Volume indication ranges between 0 to 100.

192kHz 100



Navigator controls



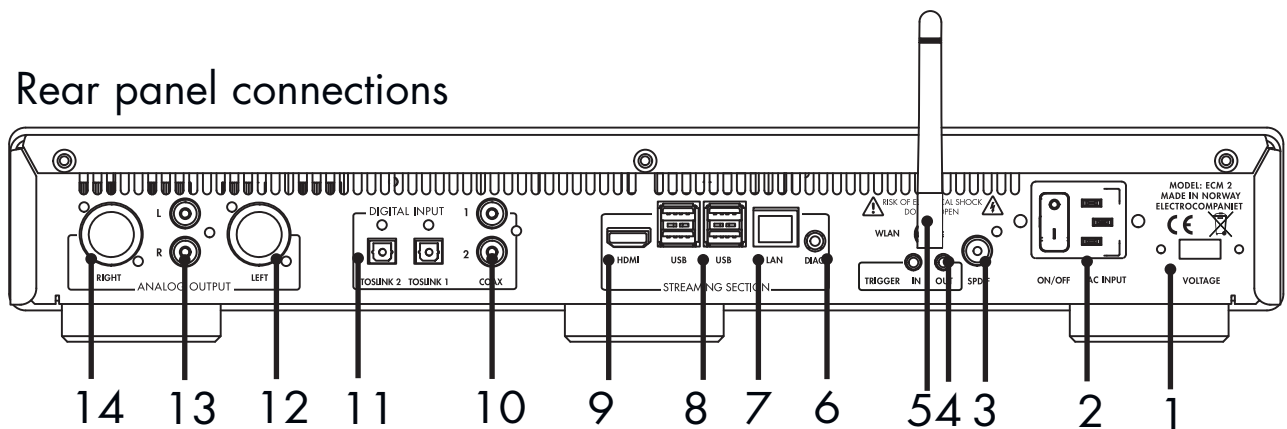
The navigation controls are used for controlling volume and choosing between the different modes of the ECM. (See page 2 for a more detailed explanation of the different user modes of the ECM)

1. **TOP button** - is used for increasing the volume of your ECM
2. **BOTTOM button** - is used for decreasing the volume of your ECM
3. **RIGHT button** - will change active user mode / input.
4. **LEFT buttons** - will change active user mode / input.
5. **STANDBY** - The standby button is used to put your ECM into, or wake from, standby. Pressing and holding this button will restart your ECM. (Press and hold until display shows the message "RESTART")
6. **INFRARED SENSOR**

The infrared sensor will detect commands from the included infrared remote control.

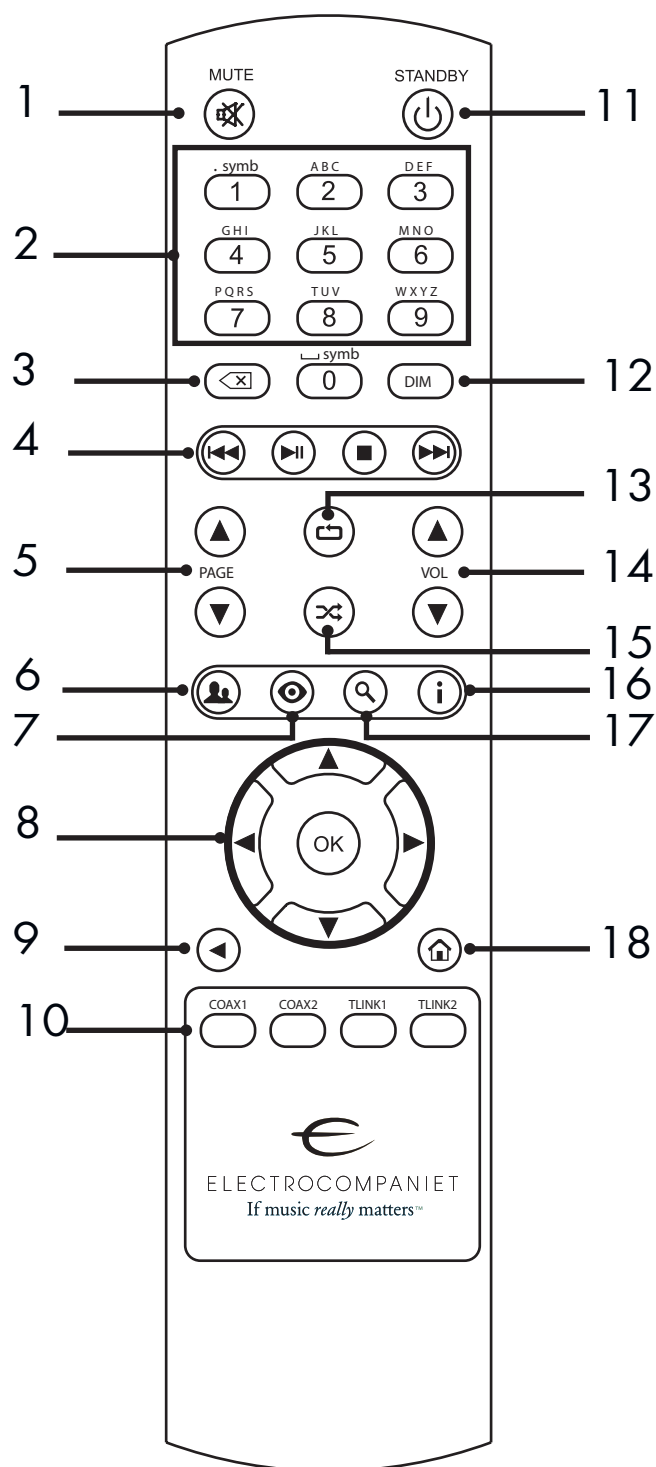
Please make sure that there is a direct line of sight between the infrared sensor and the infrared remote control. (See page 4 for more information on using an infrared remote control with your ECM)

Rear panel connections



Connector	Name	Used for	Connection type/Cable
1	Voltage	Selecting input voltage 110/240V	N/A
2	Power / AC Input	Power button. Input power	Supplied power cable
3	SPDIF	coaxial digital audio output (SPDIF)	RCA / 75-ohm coaxial cable
4	Trigger in/out	12V trigger control in-/output	3,5mm mono mini jack
5	Wi-fi connector	Wireless antenna	SMA
6	Diagnostic	Production purposes only	3,5mm mono mini jack
7	LAN	Network cable	RJ 45/ Cat 5 or higher
8	4 x USB inputs	External usb storages	USB
9	HDMI output	TV / projector connection	HDMI
10	Coax inputs 1/2	coaxial digital audio input (SPDIF)	RCA / 75-ohm coaxial cable
11	Toslink inputs 1/2	optical digital audio input	TOSLINK / optical cable
12	XLR output left	balanced audio connection	XLR / balanced audio cable
13	Coax output 1/2	unbalanced audio connection	RCA / unbalanced audio cable
14	XLR output right	balanced audio connection	XLR / balanced audio cable

Remote control



1. Mute - on/off.

(Standby mode for other Electrocompaniet devices - hold mute 1-2 sec. to set the device into a standby mode.)

2. Numeric keypad

3. Backspace

4. Media playback control

5. Page Up/Down

6. Group button

7. View button

8. Navigator. When using menus, the arrows move the selector on the screen up, down, left or right.

Press OK to confirm your selection.

9. Back

10. DAC input selector: COAX1/2, TOSLINK 1/2

11. Standby button

12. Dim - dimming the display.

13. Repeat

14. Volume up/down

15. Shuffle

16. Info

17. Search

18. Home

Replacing batteries

Use 2pcs AAA or LR03 batteries.

Observe correct polarization when inserting batteries.

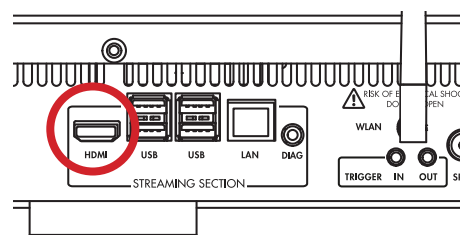
Please remove batteries when the remote is not used for a prolonged period of time.

Using the remote

When using the remote control, the front end of the remote control should be pointed to the front panel of your ECM. A free line of sight is required between the remote and the infrared sensor on the front panel.

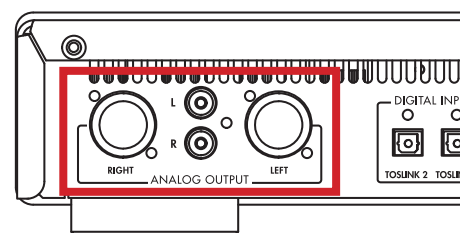
Connecting video

Connect your ECM to an appropriate display (such as a TV or projector) using the HDMI output.



Connecting audio

Your ECM has 2 different audio output modes: Analog mode and digital mode. Each audio output mode has 2 different connections available.



NOTE:

Use analog audio output mode (preferably balanced XLR) for the best audio quality from your ECM.



Analog audio output – balanced XLR

Use the balanced XLR connectors if you have an amplifier equipped with balanced XLR audio inputs. Connect the balanced XLR audio outputs from your ECM to the balanced XLR audio input on your amplifier. Observe correct connection on right and left audio channel.

Analog audio output – unbalanced RCA

Use the unbalanced RCA connectors if your amplifier is not equipped with balanced XLR audio inputs. Connect the unbalanced RCA audio outputs from your ECM to the unbalanced RCA audio input on your amplifier. Observe correct connection on right and left audio channel.

Digital audio output – HDMI

Use the HDMI connector if you wish to connect to an A/V receiver equipped with an HDMI output (for connecting a display) or if you plan to get audio out from your connected display. Please refer to the user manual for your receiver or display for more information on how to enable HDMI audio and connecting a display to your A/V receiver.

This connection supports multichannel audio when connected to equipment capable of decoding multichannel audio signals. (such as an A/V receiver) When connected directly to a TV or to a 2-channel audio system, the ECM can down mix audio to a 2-channel PCM signal.

Digital audio output – S/PDIF

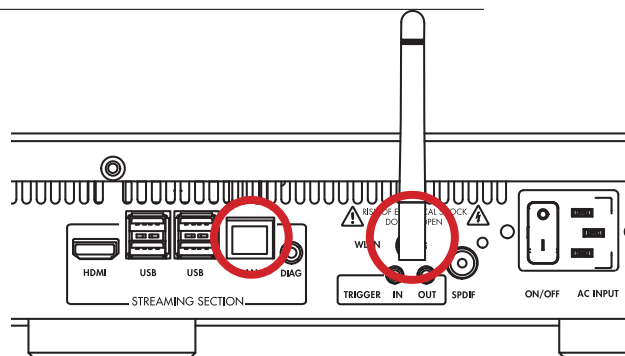
Use this connection if your A/V receiver does not have an HDMI output for connecting to a display. Multichannel audio will be decoded and downmixed to 2 channel PCM when using this output.

NOTE:

DSD and HD audio formats are only supported on the analog and the S/PDIF outputs. Dolby Digital HD and DTS HD formats are supported on the analogue and the S/PDIF outputs where they are decoded and down mixed to 2 channel PCM.

Connecting to a network

Your ECM requires a broadband internet connection for getting media info, playing internet content and for software updates. A network connection is also required for streaming content from network attached storage (NAS) and network media share locations. Your ECM provides two methods of connecting to a network: Wired network connection (using an Ethernet cable) or wireless network connection (using the built in wireless adapter).



Wired network connection (Recommended)

- Connect an Ethernet cable to the LAN port of your ECM to connect to a wired network.
 - Your ECM will automatically try to connect to your network when a network cable is detected.
- (Please refer to the Wired network setup section for detailed instructions on how to manually setup a wired network connection)

Wireless network connection

- Connect the supplied wireless antenna to your ECM if you want to connect to a wireless network.
 - Configure your wireless network connection in the network setup menu of your ECM
- (Please refer to the Wireless network setup section for detailed instructions about how to connect to a wireless network)



NOTE:

A wired connection is recommended whenever possible for speed and stability. The wireless network option is not used if wired network access is detected.

Connecting media storage

Your ECM can play media from both internal and attached storage devices. The ECM can also play media files from network sources such as network attached storage (NAS) devices and network media shares. (Refer to the Network/NAS section under Managing sources for more information on how to access media from network locations)

USB discs

- Your ECM supports playback of video and audio files stored on external USB disk drives or USB thumb drives/memory sticks. (Please refer to section for supported file formats for a complete list of supported file formats) You may connect USB discs or thumb drives to any of the 4 USB inputs on your ECM.



NOTE:

USB devices are read-only. The ECM will never write to your disk in order to prevent data corruption. USB storage may be removed at all times.

Local disc installation

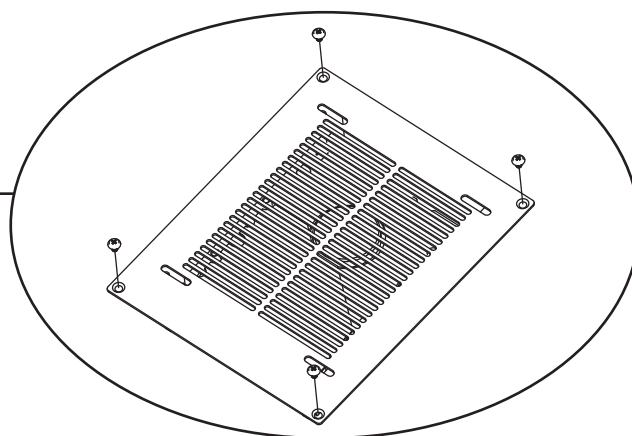
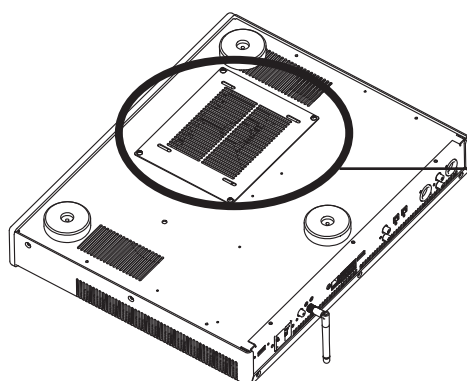
Your ECM supports adding an internal hard drive or SSD for storing media files. A drive with a SATA interface drive is required for this connection. Both 3,5" and 2,5" drives can be mounted. All common filesystems are supported, including: NTFS, ExFAT, FAT, EXT4, HFS+

NOTE:

The disk will be formatted for use. All data on the drive will be lost. If the hard drive is installed it will be turned off when not in use. This prevents vibrations from negatively influencing audio playback quality. ECM have no limitations for internal disk capacity.

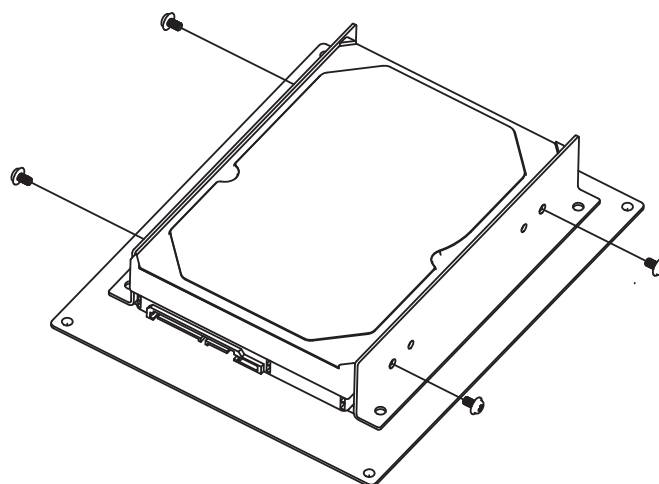
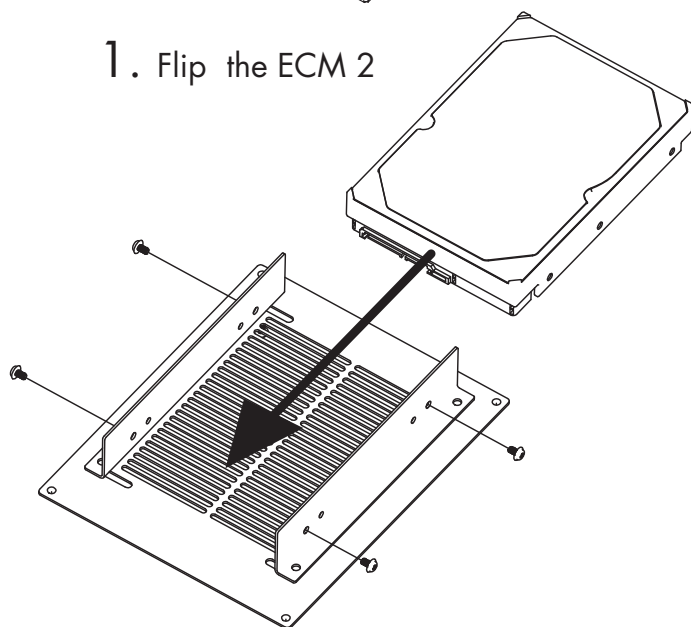


How to install internal hard drive



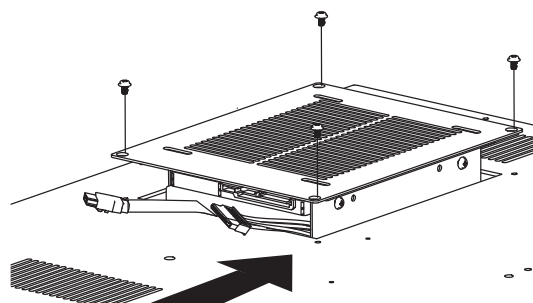
1. Flip the ECM 2

2. Remove screws and take out the HDD holder

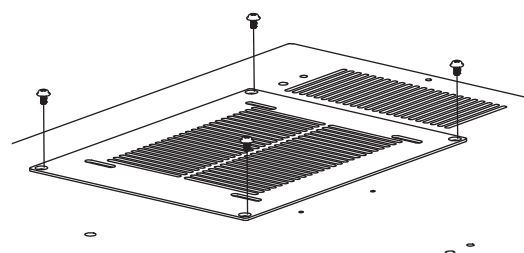


3. Insert the HDD (3,5" or 2,5")

4. Tighten the screws



5. Connect the wires



6. Tighten the screws

Connecting digital audio inputs

Your ECM is equipped with a high quality digital to analog converter (DAC) to give you the very best audio quality from your digital media files.

The DAC section of your ECM is also equipped with 4 digital inputs for connecting external digital audio sources such as: CD players, TV decoders/Set top boxes, etc.

Use these inputs to take advantage of superb analogue audio quality of your ECM, getting the best possible audio quality from all your digital sources.

Your ECM supports connecting up to 4 different digital audio sources. 2 RCA plugs (labeled COAX 1 and COAX 2) for connecting S/PDIF coaxial audio cable and 2 Toslink plugs (labeled TOSLINK 1 and TOSLINK 2) for connecting S/PDIF optical cable.



NOTE:

Audio from the digital inputs of your ECM will be available on the analogue outputs only.
The digital inputs supports PCM 96kHz/24bit on Toslink and PCM 192kHz/24bit on COAX.

Connecting trigger in/out

Your ECM is equipped with trigger input and trigger output ports. These ports can be used for automatically putting your ECM and other equipment into, or wake up from, standby mode.

Use the trigger input port for connecting to a trigger output signal from other equipment. The ECM will power up (leave standby mode) when a voltage in the range of 8V-20V (AC or DC) is detected on the trigger input port, and will remain powered on for as long as the voltage is present on the trigger input port.



NOTE:

The ECM will only react to a change in the trigger signal.
When the detected trigger signal goes from low to high, ECM will wake from standby.
When the detected trigger signal goes from high to low, ECM will go into standby.
A low trigger signal is defined as less than 1V (AC or DC)
A high trigger signal is defined as more than 8V(AC or DC)
The voltage supplied to the trigger input must not exceed 20V (AC or DC)
A trigger signal is not mandatory to operate the ECM.

Use the trigger output to send the trigger signal to your amplifier, TV, projector or other equipment that support triggers signals. This signal can be used to automatically switch on/off the connected equipment when you turn on/off your ECM. Trigger output is 12V DC.

Use a 3,5mm mono jack plug for connecting to trigger input and trigger output.

Initial setup screen

When your ECM is started for the first time, a setup wizard will guide you through the basic settings needed to set up your ECM for optimal performance. The setup wizard consists of a few easy steps and will only take a couple of minutes to complete.





Library

For easy navigation of your music and video collection, your ECM will keep information about your music and video files from different sources/locations in a library. The library will hold information about artist, album, track name, movie title, album/cover images, where the files are stored, etc.

The library is split into 3 different sections: Music, Videos and TV Shows. To make your music and video files available to the ECM, your media files need to be added to the correct library first.

	Update Library	
	Number of Albums/Tracks	123/1490
	Number of Movies	14
	Number of TV Series/Episodes	6/413

NOTE:

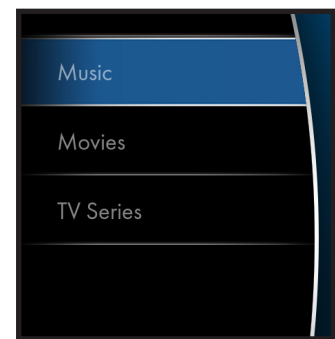
The library will only hold information about your music/video files for easy navigating through your music/video collection. It will not hold a copy of your files.



When adding files to the library, the ECM will connect to the internet to collect information about the files added. The data collected will include information about artists, albums, tracks, discography, movie titles, actors, directors, thumbnail pictures etc.

Music added to the library needs to be correctly tagged for the ECM to collect accurate information from the internet.

Video files added to the library needs to be accurately named for the ECM to collect accurate information from the internet.



NOTE:

It is important that your media files are tagged / named correctly for the ECM to be able to collect accurate information. If some of your media files are not recognized properly, please check that all music tags are spelled correctly and have correct information. If movies or TV series are not recognized, please check file-name spelling, try using the original title and add release year to the file name.



Managing sources

Media files can be made available for playback on the ECM in 3 different ways: on local drive, on USB attached external drive or on a network location such as a NAS (Network attached storage) or a network media share.



NOTE:

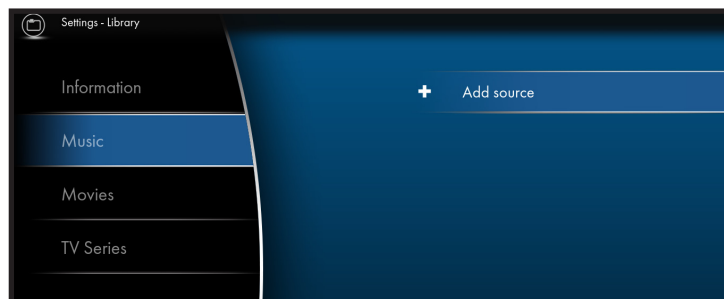
If content (for example: a new song or music album) is added to any source (folders or discs) that is already included in the ECM library, the library needs to be updated before the new content is available for playback.

If content is removed from the ECM (files/folders deleted, sources disconnected), the library will still keep information about the missing content until the library is updated or the content is made available again. The removed content will be unavailable for playback.

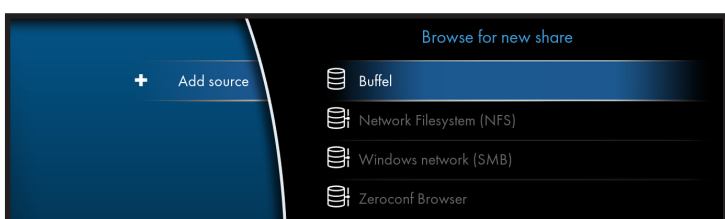
To include media from a source in the library, please navigate to the Library menu of your ECM and then choose the correct section (Music, Movies or TV Series) according to the type of media files you want to include in the library. Add the media file sources as described for the different media locations below.



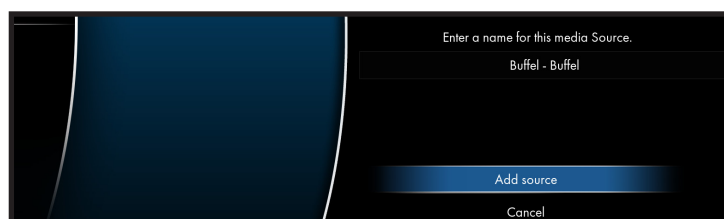
1. Select "Library"



2. Choose Music, Movies or TV series



3. Browse for a source. Press the "OK" button to explore the folders.



4. Hold the "OK" button to add the source.

Internal storage

The internal drive is automatically added as a source in your libraries. A drive unit HDD/SSD must be installed in your ECM before you can add content. Please refer to the section "Local disc at page 9" for detailed instruction on how to install a drive unit in your ECM.

After a drive unit is installed you can copy your media files to the drive through your network using the file managing tool on your computer. (see page 25-26)

Info page




Entire overview of your library with the number of items in each library

Update library

Checks if files in the library have been changed, added or removed. Modifies the database accordingly and runs a cleaning utility.

Press "OK" for starting the library update process. This may take a while depending on the size of your library. When leaving the page by pressing "BACK" or "HOME" buttons the update process will progress in background until a complete update scan is finished.

The scan progress will be shown in the upper left corner of your screen.

Update Library		
	Number of Albums/Tracks	123/1490
	Number of Movies	14
	Number of TV Series/Episodes	6/413

Library scan status

This line will show detailed information about the actually scan status when **Update library** is active. The library scan progress is indicated in the top left corner during the scanning process.

Screen navigation common controls

The navigator arrow buttons on the remote is used to navigate up, down, left and right on the different pages of your ECM.

The "HOME" button on the remote will always bring you back to the Home page of your ECM.

The "BACK" button will take you back to the previous page from where you came.

The "OK" button will activate the selected item on the screen. See further explanation of this button in the sections below.

The "PAGE UP" and "PAGE DOWN" buttons will navigate one whole page up or down.

Text input:

When text input is needed, your ECM will display a virtual keyboard. This consist of a line where all available characters, numbers etc. is displayed.

There are 2 ways to type in text and numbers when this is needed:

- **Numeric keypad on remote:**

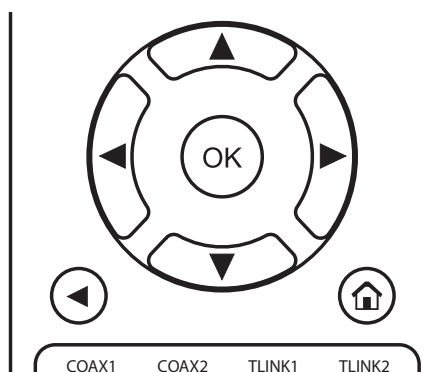
Each of the numeric buttons on the remote also represents a selection of characters (displayed in the text above the numeric key). To write a character, simply repeatedly and rapidly press the corresponding numeric key until the desired character is shown in the search field. For example: Pressing the (5) one time gives the character "i". Pressing the same button rapidly 2 times gives the character "k" and so on.

- **Navigator:**

Use the up or down navigator arrows to select the character you want to insert. When the desired character is displayed, press navigator arrow right to do the same for the next character you want to input.



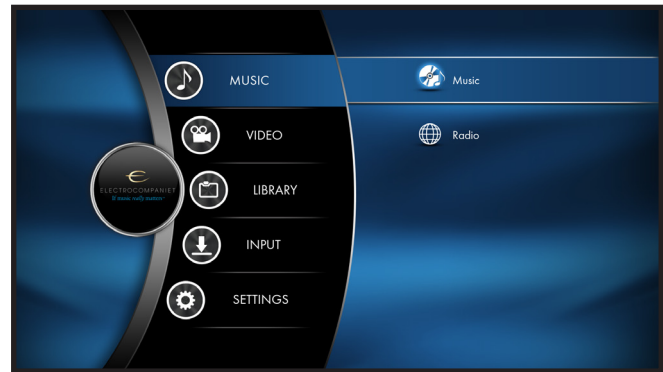
Use the up or down navigator arrows to select the character.
Press a "Backspace" button to delete the character.








Navigating the home screen

The home screen is the main screen of your ECM. This screen consists of a main menu with the following sections: "Audio", "Video", "Library", "Input" and "Settings". Use the UP /DOWN arrow buttons on the remote to select a main menu section.

When a main menu section is selected, a list of areas is displayed in the sub menu to the right of the home menu. Press the RIGHT arrow button to go into the sub menu of the selected main menu section. Use the UP / DOWN arrow buttons to select an area. Press "OK" button on the remote to enter the selected area. When you are in a sub menu, you can press the LEFT navigation arrow button on remote if you want to go back to the main menu and choose a different section.



Main menu sections	Sub menu areas	Description
 MUSIC	Music library	Browse your music library
	Internet Radio	Browse the internet radio stations.
 VIDEO	Movies	Browse your movie library
	Series	Browse your TV series library
	You Tube	Watch videos from YouTube
 LIBRARY		Manage your media library
 INPUT	Toslink 1	Choose Toslink 1 input on DAC
	Toslink 2	Choose Toslink 2 input on DAC
	Coax 1	Choose COAX 1 input on DAC
	Coax 2	Choose COAX 2 input on DAC
 SETTINGS	Preferences	View and edit your preferences for the ECM
	Library	Add content to your ECM's library
	Network	View and edit your network settings
	Output settings	View and edit your Audio/Video output settings
	Firmware	View system info and perform factory reset

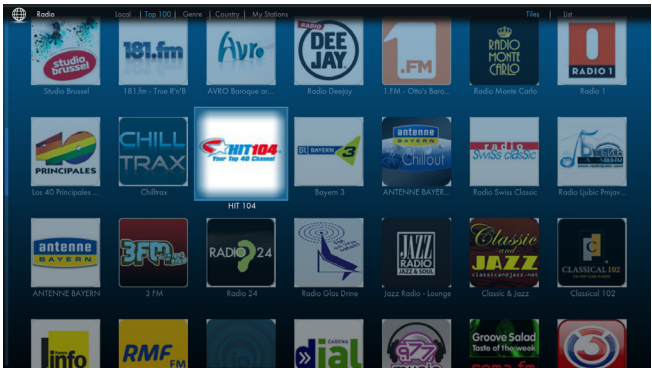


Navigating the libraries

This section explains how to navigate and change layout and grouping of the libraries. The navigation controls also applies to the internet radio section and the YouTube section.

Use the navigator arrow buttons on the remote to navigate up, down, left and right.

The "PAGE UP" and "PAGE DOWN" buttons will navigate one whole page up or down.



Library grouping

When navigating the library, you can change the way the library is grouped by pressing the "GROUP" button on the remote. For example: In the music library you can choose to display items grouped by artist, by album or by genre. (Please refer to the table in the next section for information on available grouping methods for the different libraries)

Library display view

The library can be displayed in different ways depending on what library you are currently browsing. Available display view layouts are: List view, Tiles view and Fanart view.

Press the "VIEW" button on the remote to change the display view layout. The last selected view mode will be remembered for each screen.

The available display views for different library groupings are:

Library:	Available grouping:	Available display view:
Music Library	Album	Tiles view Fanart view List view
	Artist	
	Genre	
Internet Radio	Local	Tiles view List View
	Top 100	
	Genre	
	Country	
	My Stations	
Movies Library	Film	Tiles view Fanart view List view
	Actor	
	Genre	
TV Show Library	Show	Tiles view Fanart view List view
	Actor	
	Genre	
You Tube	Categories	Tiles view List View

Searching

A powerful search tool is available in the library. To start a search, simply press the "SEARCH" button on the remote. This will place a cursor in the search field and you may start typing on the virtual keyboard. You can search for any part of the information stored in the library. The search tool will automatically display all items with information matching the search string entered. Example: typing "**ing**" in the search field will return the artist "Bruce **Spring**steen", the album "Sailing to Philadelphia", the album featuring the song "Money for **Nothin**g" and so on (as long as these items are in your collection). To narrow the search results, simply keep typing more of the word(-s) you are searching for.

When searching in any of the libraries (Music Library, Movie Library, Series Library) the search results are updated in real time as you type. When searching any of the internet based sections (Internet Radio or You Tube) you have to type in your search word(-s) and then press the "OK" button to perform the search. When you are done searching, simply press the navigation arrow buttons to select the desired item from the search result.

Media info

By pressing the "INFO" button on the remote when an item in the library (artist, album, song, movie title or TV show) is selected, the ECM will bring up a page containing detailed information about the selected item.

Play queue

Long pressing the "INFO" button on the remote will bring up the current play queue. Press the "BACK" button to exit the queue display. (Please refer to the different sections below for detailed explanation of the play queue feature.)

Other controls

When an item is selected, press and hold the "OK" button on the remote for about 1 second to bring up a context menu.

The context menu provides additional options for the selected item. The context menu will be different for different items / sections. Please refer to the different sections below for detailed explanations of the context menus.

General Playback controls

Pressing the "PLAY/PAUSE" button when any media (music/video/net radio/Spotify) is playing, will pause the playback. When playback is paused, pressing this button will resume playback again. This button does not have any function if no media is already playing or is paused.

Pressing "STOP" button on the remote will always stop any ongoing media playback (even if playback is paused) and will clear the queue.

Briefly pressing the "NEXT TRACK" button on the remote will skip to next song in the queue. Pressing and holding the "NEXT TRACK" button (for at about 1 second) will fast forward in the song playing. Keep the button depressed (or long press it again) until the desired forward speed is achieved (indicated on the screen). Press the "PLAY/PAUSE" button to resume normal playback speed.

Briefly pressing the "PREVIOUS TRACK" button on the remote will skip to the previous song in the queue. Pressing and holding the "PREVIOUS TRACK" button (for at about 1 second) will rewind in the song playing. Keep the button depressed (or long press it again) until the desired rewind speed is achieved (indicated on the screen). Press the "PLAY/PAUSE" button to resume normal playback speed.

Pressing the "REPEAT" button will activate the repeat all function. If you have created a play queue (by selecting the "Play from here" function) this will repeat the queue when playback comes to the end of the queue, otherwise only the playing episode will be repeated. One more press on the button activates the "repeat one" mode and only the current playing episode will repeat. A third press on the button will turn repeat off.

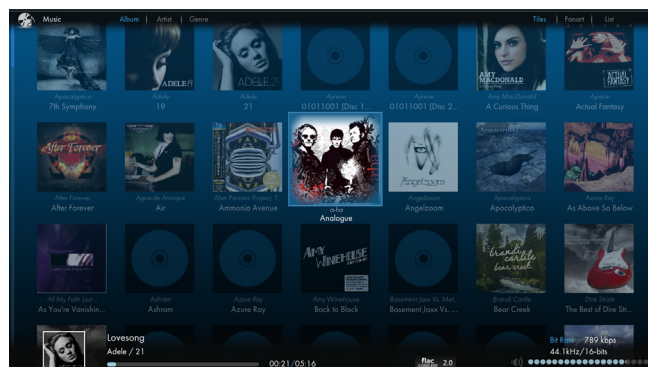
Pressing the "SHUFFLE" button on the remote will activate the shuffle function. The shuffle function will randomly select the next episode to play from the queue if a queue is created.

Music library

Playback controls

The "OK" button on the remote has two functions depending on if the button is pressed briefly or if you press and hold the button for at least 3 sec.

Pressing the "OK" button briefly:



- If a song is the selected item on the screen:
This will make a queue of the complete list of songs displayed on the screen in the order which they are displayed. Playback will start from the created queue at the position where the selected song is in the queue.
The queue is stored as long as playback is not stopped or replaced by a new queue.
- If an album is the selected item on the screen: This will display the songs in the selected album.
- If an artist is the selected item on the screen: This will display the albums by the selected artist
- If a genre is selected item on the screen: This will display the folders sorted by genre.

Context menu

Long pressing the "OK" button (press and hold for about 1 Second) will bring up a context menu on the screen with the following choices:

- Queue at end:
This will add the selected song, the selected album, all the songs by the selected artist or all the songs in this genre to the end of the existing queue.
If no queue exists (playing or paused), the selected song, all the songs by the selected artist or all the songs in this genre will make up a new queue and playback will start immediately.
- Play now:
This will replace any currently playing (or paused) queue with a new queue containing the selected song, all the songs by the selected artist or all the songs in this genre. Playback of the new queue will start immediately.
- Queue next:
This will add the selected song, the selected, all the songs by the selected artist or all the songs in this genre to the top of the current playing queue to be played after the current song is finished.
If no queue exists (playing or paused), the selected song, the selected all the songs by the selected artist or all the songs in this genre will make up a new queue and playback will start immediately.
Use the navigator to select an option

Briefly pressing the "NEXT TRACK" button on the remote will skip to next song in the queue. Pressing and holding the "NEXT TRACK" button (for at about 1 second) will fast forward in the song playing. Keep the button depressed (or long press it again) until the desired forward speed is achieved (indicated on the screen). Press the "PLAY/PAUSE" button to resume normal playback speed.

Briefly pressing the "PREVIOUS TRACK" button on the remote will skip to the previous song in the queue. Pressing and holding the "PREVIOUS TRACK" button (for at about 1 second) will rewind in the song playing. Keep the button depressed (or long press it again) until the desired rewind speed is achieved (indicated on the screen). Press the "PLAY/PAUSE" button to resume normal playback speed.

Pressing "REPEAT" when music is playing will activate repeat for the current playing queue. Pressing the button a second time will repeat the current playing song only and pressing the button a third time will turn off the repeat function.

Pressing the "SHUFFLE" button on the remote will activate the shuffle function. The shuffle function will randomly select the next song to play from the currently playing queue after the currently playing song is finished.

Playbar: Music Library

When playing music, the playbar is visible on the bottom of the screen. The playbar consists of the following:



- | | |
|---------------------------------------|---|
| 1. Album art. | 8. Audio format. |
| 2. Progress bar | 9. Number of audio channels |
| 3. Song title | 10. Volume Mute On/off indicator |
| 4. Artist name / Album name | 11. Volume level indicator |
| 5. Elapsed time / total time of song. | 12. Sampling frequency / resolution |
| 6. Shuffle status icon | 13. Audio bit rate (of the source file) |
| 7. Repeat status icon | |

Internet Radio



Playback controls

As net radio is streaming live from the radio stations, only the play/pause and stop buttons are functional playback controls in this section.

The "OK" button on the remote has two functions depending on if the button is pressed briefly or if you press and hold the button for at least 1 second:

Pressing the "OK" button briefly will start streaming from the selected radio station.

Context menu

Long pressing the "OK" button (press and hold for about 1 second) will bring up a context menu on the screen with the following choices:

- Tune in: This will start streaming from the selected radio station
- Add to Favorites: This will add the selected radio station to the "Favorites" category which is a list where you can store your favorite radio stations for fast and easy access.

When streaming from a radio station, the "PLAY/PAUSE" button on the remote will pause streaming and buffer content. Pressing the button again will resume playback from the position where playback was paused.

Playbar: Internet Radio

When streaming from internet radio, the playbar is visible on the bottom of the screen.

The playbar consists of the following:



- | | |
|--|---------------------------------|
| 1. Radio station icon / thumbnail image. | 5. Audio format. |
| 2. Progress bar | 6. Number of audio channels. |
| 3. Information text: Info from the radio station.
(Show name, song name, other information) | 7. Volume Mute On/off indicator |
| 4. Elapsed time streaming from radio station. | 8. Volume level indicator |
| | 9. Sampling frequency |

Movies

Playback controls

When browsing/navigating the movie library, the "OK" button on the remote has two functions depending on if the button is pressed briefly or if you press and hold the button for at about 1 second:

Pressing the "OK" button briefly:

- If a movie is the selected item on the screen and playback of the selected movie has previously been started but was disrupted before the end of the file, you will be given the choice to resume from where the playback was previously disrupted or to start playback from the beginning of the movie. Otherwise playback will start from the beginning of the movie.
- If an actor is the selected item on the screen, a list of all the movies featuring that actor will be shown.
- If a genre is the selected item on the screen, a list of all the movies within this genre will be shown.

Context menu

If a movie is the selected item on the screen, long pressing the "OK" button (press and hold for at about 2 second) will bring up a context menu on the screen with the following choices:

- Resume from...
Resume playback from where it was last interrupted.
This option is only available if the selected video was previously started but stopped before video was finished.
- Watch: Play video from the beginning.
- Show trailer
Watch trailer for the selected video. (An active internet connection is required for this option as the trailer will be streamed from the internet)
- Mark as watched/unwatched.
Select this option if you want to toggle the watched status for the selected video

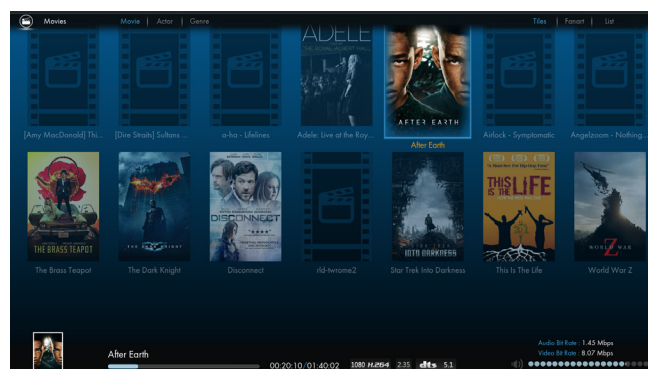
A brief press on the "NEXT TRACK" button on the remote will skip to next chapter (if any) in the currently playing video.

Pressing and holding the "NEXT TRACK" button (for at least 3 seconds) will fast forward in the video file playing. Keep the button depressed (or long press again) until the desired forward speed is achieved (indicated on the screen). Press the "PLAY/PAUSE" button to resume normal playback speed.

A brief press on the "PREVIOUS TRACK" button on the remote will skip to the previous chapter (if any) in the currently playing video.

Pressing and holding the "PREVIOUS TRACK" button (for at least 3 seconds) will rewind in the video file playing. Keep the button depressed (or long press again) until the desired rewind speed is achieved (indicated on the screen). Press the "PLAY/PAUSE" button to resume normal playback speed.

Pressing "REPEAT" when a video is playing will activate "repeat all" for the current playing movie. Pressing the button a second time will activate "repeat one" for the current playing movie. As only the current playing movie is in the queue, the "repeat all" and the "repeat one" will both repeat only the currently playing movie. Pressing the button a third time will turn off the repeat function.



Audio, subtitle and zoom selection

Long pressing (press and hold for at least 1 second) the "OK" button while a video file is playing will bring up a context menu where you can choose between the different available audio tracks, subtitle tracks and zoom levels. Use the navigator arrow buttons to choose the desired settings. Press the "OK" button to confirm your selections. Pressing the "BACK" button will exit the without making any changes.

Direct navigation:

You can jump to a specified time within the currently playing video file. To do this, simply use the numeric buttons to specify the desired time and press the "PLAY/PAUSE" button to start playback from this location in the video. If the "PLAY/PAUSE" is not pressed within a short period of time, the ECM will abort the direct navigation.

Playbar

While playing movies, the playbar is hidden by default. To show the playbar, press "INFO" or "OK" button on the remote.

The playbar consists of the following:



- | | |
|--|----------------------------------|
| 1. Movie art | 7. Aspect ratio |
| 2. Progress bar | 8. Audio format |
| 3. Movie title | 9. Number of audio channels |
| 4. Elapsed time / total time of movie. | 10. Volume Mute On/off indicator |
| 5. Video resolution | 11. Volume level indicator |
| 6. Video codec | 12. Video bit rate |
| | 13. Audio bit rate |

Series playback controls

When browsing/navigating the series library, the "OK" button on the remote has two functions depending on if the button is pressed briefly or if you press and hold the button for about 1 second.

Pressing the "OK" briefly:

- If a series episode is the selected item on the screen and playback of the selected episode has previously been started but was disrupted before the end of the file, you will be given the choice to resume from where the playback was previously disrupted or to start playback from the beginning of the episode file. Otherwise playback will start from the beginning of the episode.
- If a series show is the selected item on the screen, a list of seasons in the selected series will be shown. If only one season is available a list of episodes will be shown instead.
- If an actor is the selected item on the screen, a list of all the series featuring that actor will be shown.
- If a genre is the selected item on the screen, a list of all the series in that genre will be shown.

Context menu

If a series, season or episode is the selected item on the screen, long pressing the "OK" button (press and hold for about 1 second) will bring up a context menu on the screen with the following choices:

- Mark as unwatched:
This will mark the episode or all the episodes of the selected season/show as unwatched in the library.
- Mark as watched:
This will mark the episode or all the episodes of the selected season/show as watched in the library.
- Watch: (only for episode)
This will start playback of the selected episode.
- Play from here: (only for episode)
This will create a queue beginning at the selected episode and through all the subsequently displayed episodes in the displayed list on the screen. Playback will start from the selected episode.

A brief press on the "NEXT TRACK" button on the remote will skip to next chapter (if any) in the currently playing series episode.

Pressing and holding the "NEXT TRACK" button (for at least 2 seconds) will fast forward in the episode playing. Keep the button depressed (or long press again) until the desired forward speed is achieved (indicated on the screen). Press the "PLAY/PAUSE" button to resume normal playback speed.

A brief press on the "PREVIOUS TRACK" button on the remote will skip to the previous chapter (if any) in the currently playing series episode.

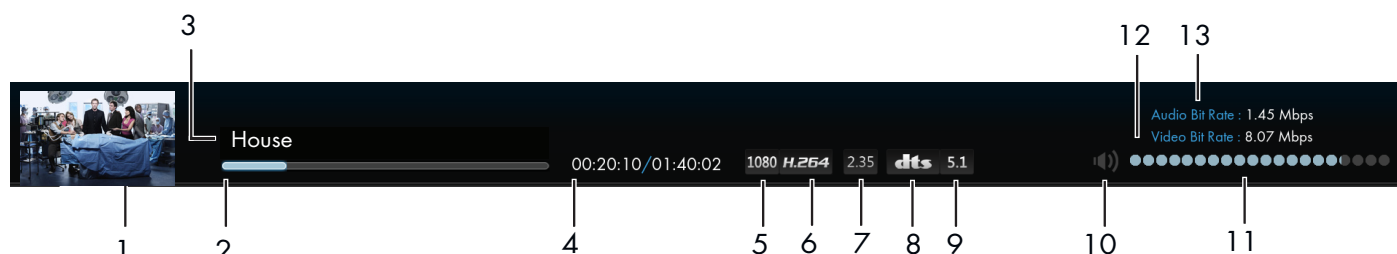
Pressing and holding the "PREVIOUS TRACK" button (for at least 2 seconds) will rewind in the episode playing. Keep the button depressed (or long press again) until the desired rewind speed is achieved (indicated on the screen). Press the "PLAY/PAUSE" button to resume normal playback speed.

Pressing the "REPEAT" button will activate the repeat all function. If you have created a play queue (by selecting the "Play from here" function) this will repeat the queue when playback comes to the end of the queue, otherwise only the playing episode will be repeated. One more press on the button activates the "repeat one" mode and only the current playing episode will repeat. A third press on the button will turn repeat off.

Pressing the "SHUFFLE" button on the remote will activate the shuffle function. The shuffle function will randomly select the next episode to play from the queue if a queue is created.

Playbar

While playing movies, the playbar is hidden by default. To show the playbar, press "INFO" or "OK" button on the remote. The playbar consists of the following:



- | | |
|---------------------------------------|----------------------------------|
| 1. Episode image | 8. Audio format |
| 2. Progress bar | 9. Number of audio channels |
| 3. Episode title | 10. Volume Mute On/off indicator |
| 4. Elapsed time/total time of episode | 11. Volume level indicator |
| 5. Video resolution | 12. Video bit rate |
| 6. Video codec | 13. Audio bit rate |
| 7. Aspect ratio | |



YouTube

Playback controls

If the different YouTube categories are displayed on the screen, briefly pressing the "OK" button will open the selected category and display the YouTube videos within this category.

If a list of videos is displayed on the screen, briefly pressing the "OK" button will start playback of the selected video.

If a list of videos is displayed on the screen and the selected video has been started before without playing to the end of the video, you will be given the choice to start from where playback was previously interrupted or to start playing the video from the beginning.

If a list of videos is displayed on the screen, long pressing the "OK" button (press and hold for at least 1 second) will bring up a context menu with the following choices:

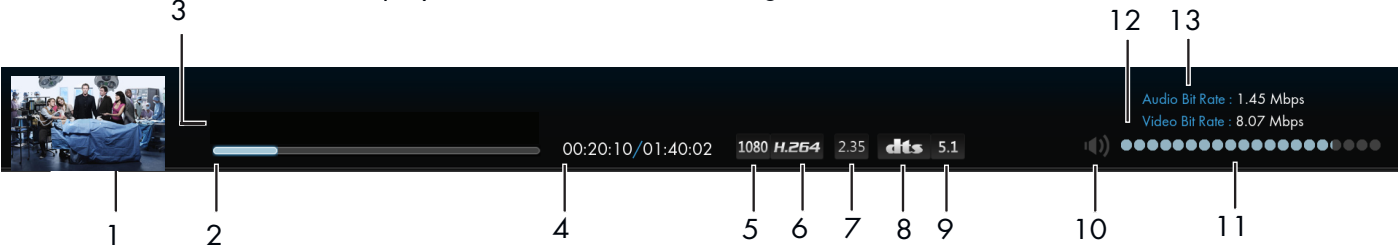
- Watch:
Same as briefly pressing the "OK" button. (see explanation above)
- All videos of...
Show a list of all the videos posted on YouTube by the user who posted the selected video.
- Show related:
Show YouTube videos that are similar to the selected video.

Pressing and holding the "NEXT TRACK" button (for at least 1 second) will fast forward in the episode playing. Keep the button depressed (or long press again) until the desired forward speed is achieved (indicated on the screen). Press the "PLAY/PAUSE" button to resume normal playback speed.

Pressing and holding the "PREVIOUS TRACK" button (for at least 1 second) will rewind in the episode playing. Keep the button depressed (or long press again) until the desired rewind speed is achieved (indicated on the screen). Press the "PLAY/PAUSE" button to resume normal playback speed.

Playbar

While playing the video, the playbar is hidden by default. To show the playbar, press "INFO" or "OK" button on the remote. The playbar consists of the following:



- | | |
|---------------------------------------|----------------------------------|
| 1. Episode image | 8. Audio format |
| 2. Progress bar | 9. Number of audio channels |
| 3. Episode title | 10. Volume Mute On/off indicator |
| 4. Elapsed time/total time of episode | 11. Volume level indicator |
| 5. Video definition (SD/HD) | 12. Video bit rate |
| 6. Video codec | 13. Audio bit rate |
| 7. Aspect ratio | |

Digital inputs



Pressing any of the input buttons will start the DAC mode of your ECM with the chosen input as active. Playback must be controlled at the connected digital source. Please refer to the manual of the connected equipment for details on navigation and playback control.



NOTE:
Activating any of the digital inputs on your ECM will stop any ongoing media playback.

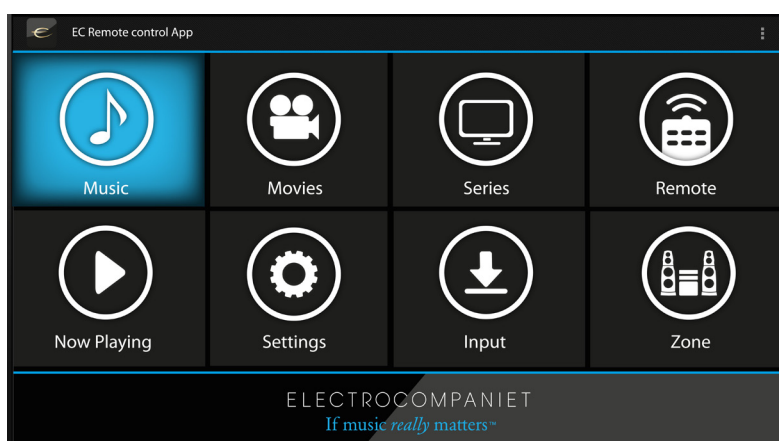
Accessing the ECM from network

App for Andoid/iOS

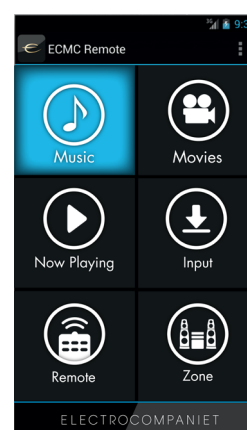
An app to control your ECM is available in the Google Play store for android powered devices. Search for Electrocompaniet ECM in the Google Play store or scan the QR code.

App for iOS will be available soon.

The app will let you browse your library and control playback on your ECM.



Tablet app



Smart phone app

NOTE:

Your computer have to be connected to the same network as your ECM for access through network.



UPnP

Your ECM fully supports the UPnP protocols for sharing and communicating with other UPnP enabled devices. Your ECM will act as a UPnP server.

Web interface

A simple web interface is available for controlling your ECM from any device with a web browser within your network (such as a computer, a smart phone or a tablet etc.)

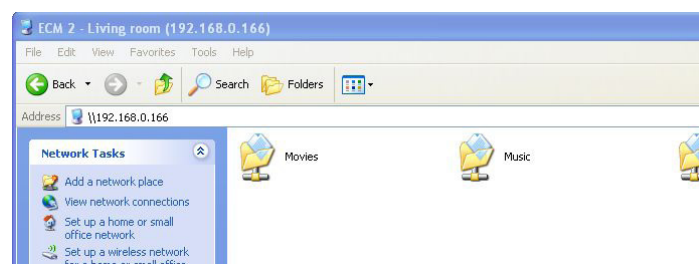
Open the web browser on your device and write the IP address of your ECM as the web address (URL).

Exploring internal storage

Exploring internal storage:

Windows:

You can access your ECM's local storage (if you have added a local drive) using the windows explorer. Open the windows explorer on your computer and navigate to the Network section. Your ECM should be available identified with the name of the unit.



NOTE:

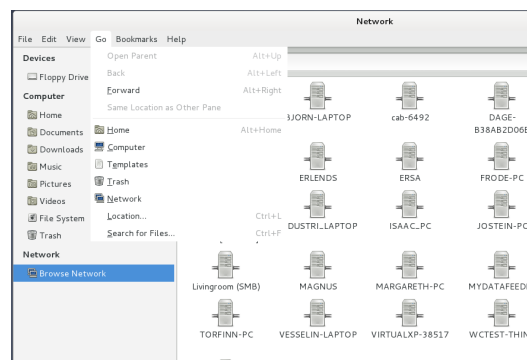
You can also access your ECM by typing the IP address, or the name of your unit, using the windows explorer. For example: \\192.168.0.1 or \\ECM2. You can always check the IP address in Settings -> Information.



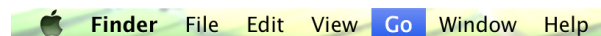
Mac

Your ECM 2 will be automatically detected and shown under the "SHARED" section in the left panel of Finder. Its name will be the same as the system name, with any spaces and special characters removed.

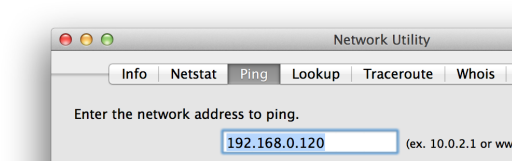
If it is not shown in the left pane, press the "All..." button under SHARED in order to show all neighbourhoods. Then, select the "workgroup" neighbourhood, and find your machine in the list.



In the event that automatic detection or connection fails, manual connection can be established. In Finder's menu bar, select "Go" and then "Connect to Server... (OK)". Here, fill in `cifs://<ip address>`, where <ip address> is the IP Address as reported by the system in the Settings -> Network menu.



For advanced users, connection can also be established via NFS. This will have to be performed manually by selecting "Go" and then "Connect to Server... (OK)" from the finder. Then, type in `nfs://<ip address>/data/<share>`, where <share> is either Music, Movies or TVshows.



Troubleshooting

When no manual connection can be established, please verify that your machine and the ECM are properly situated on the same network.

This can be verified by opening Network Utility and selecting the "Ping". Here, fill in the IP address of your system, reported in the Settings -> Network menu. Select the option "Send only <10> pings". The second to last line of the output should state "10 packets transmitted, 10 packets received, 0.0% packet loss". If this is not the case, please verify your network configuration.

In case of network issues, basic troubleshooting can be performed by pressing "Assist me..." from the Network preference pane. If this does not solve your networking issues, please contact your networking professional.

Linux

On Debian and Ubuntu systems with Gnome or Unity desktops, your ECM will automatically be detected. In the file browser, select "Browse Network" under "Network" in the left pane. Simply find and select your system from this list in order to connect to it.

In the event that automatic detection or connection fails, manual connection can be established. In the menu of the file browser, select "Go" and then "Location". Here, fill in `cifs://<ip address>`, where <ip address> is the IP Address as reported by the system in the Settings -> Network menu.

Connection can also be established via NFS. This will have to be performed manually via the terminal. The ECM exposes its shares on the following paths: data/Music, data/Movies and data/TVshows. For example, "mount 192.168.1.123:/data/Music /mnt/music" will mount the music share of the ECM on /mnt/music.

Settings - Preferences

↳ General

- Name

Here you can change the units name from ECM 2 to a name of your choice.

(Settings will be applied automatically after a few seconds)

- Play the next video automatically

The setting enables to automatically play the next item in the current folder.

Press "OK" for changing the setting.

- Sort audio albums by

Sort your music library by either album name or artist name.

Mark one of the arrows by using the right or left navigator arrow button and press to change.

- Enable YouTube Safe Search

Safe Search is a feature of YouTube Search that acts as an automated filter of pornography and potentially offensive content.

Mark one of the arrows by using the right or left navigator arrow button and press to change.

- Ignore remote control volume buttons

The setting avoids the unit reacting on your remote controls volume buttons.

Press "OK" to turn this feature on or off.

↳ Accounts

- Submit songs to Last.fm

Allows you to submit information about the music you play to Last.fm.

Press "OK" to turn this feature on or off.

- Last.fm username and password

Enter your Last.fm user name and password here.

This setting will only be active if the above feature Submit songs to Last.fm is enabled. A valid username and password for Last.fm is needed.

- Submit songs to Libre.fm

Allows you to submit information about the music you play to Libre.fm.

Press "OK" to turn this feature on or off.

- Libre.fm username and password

Enter your Libre.fm user name and password here.

This setting will only be active if the above feature Submit songs to Libre.fm is enabled. A valid username and password for Libre.fm is needed.

↳ Localization

- Language

This setting will change the systems user interface language.

Mark one of the arrows by using the right or left navigator arrow button.

Press the "OK" button to change language.

(Selected language will be applied automatically after a few seconds)

- Region

Allows you to select various formats for time and date.

- Time zone country

Allows you to select the time zone country you live.

- Time zone

Allows you to select the time zone you live available within your chosen country.

- Preferred audio language

Select the preferred audio language for your movies. The movie will start playing with the preferred audio track if different audio tracks are supported and your language is there.

- Preferred subtitle language

Select the preferred subtitle language for your movies. The movie will start playing with the preferred subtitle language if different subtitle languages are supported.

Settings - Network

↳ Information

- **Internet access**

Status information about your Internet connection.

YES – Internet available

NO – no Internet connection available

- **Wired connection**

Status information, Mac address and IP address of your wired network connection.

- **Wireless connection**

Status information, Mac address and IP address of your wired network connection.

↳ Configure wired

Select the networking type of your wired connection by pressing the "OK" button. You can configure the IP address, Gateway, Subnet mask and DNS using on screen keyboard.

↳ Configure wireless

Select the "Configure networking type" button and press "OK" for establishing the wireless connection. Choose preferable network from an on-screen pop-up menu and press the "OK" button. Follow the further on-screen instructions.

Settings - Output Settings

↳ Audio

This setup menu provides options to set/change your audio output settings.

(Please refer to Connecting audio section for detailed explanation about the different audio output options provided with your ECM)

- **Volume normalisation (volume adjustment)**

When volume normalization is enabled the unit will read the ReplayGain tag in your audio files and normalize the sound level accordingly. You can choose between track levels and album levels.

- **Audio output**

Allows you to select between analogue/SPDIF and digital (HDMI) output. Choose analogue/SPDIF if you plan to connect the balanced XLR outputs or the digital SPDIF to your amplifier. Select HDMI if you connect digital to your home cinema receiver or TV. For best audio and video performance connect your ECM using the balanced analogue outputs to your amplifier and the HDMI output to your TV. Make sure analogue/SPDIF is selected in this case.

- **Speaker configuration** (Only selectable if Audio output is set to HDMI)

Select the supported speaker configuration of your Home Cinema Receiver/ decoder. *Example: If your Home Cinema Receiver supports 5.1 channel and you have connected all 6 speakers you select 5.1 on your ECM. If you use 5 speakers without subwoofer you select 5.0.*

-Dolby Digital(AC3) capable receiver (Only selectable if Audio output is set to HDMI)
Select if you use a Dolby Digital(AC3) capable receiver.

-DTS capable receiver (Only selectable if Audio output is set to HDMI)
Select if you use a DTS capable receiver.

-AAC capable receiver (Only selectable if Audio output is set to HDMI)
Select if you use a AAC capable receiver.

Settings - Output Settings

↳ Video

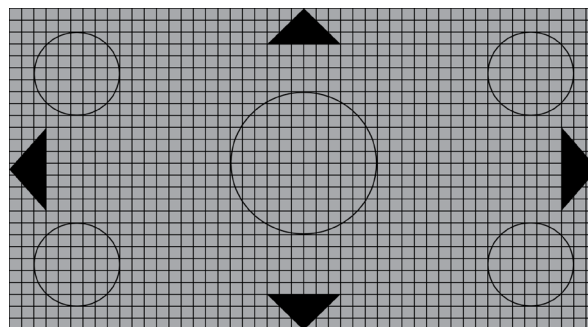
Here you can change the output video resolution from your ECM. Refer to the user manual of your TV and choose the output resolution from the ECM to match the preferred input resolution of your display. To display the user interface and your movies in full HD use 1920x1080p. Usually no changes will be needed here as the ECM will autodetect the preferred resolution of your display.

Available resolutions: 1920x1080p, 1680x1050, 1600x900, 1440x900, 1440x1050p, 1280x1024p, 1024x960p, 1280x800p, 1280x768p, 1280x720p, 1024x768p, 1024x600, 800x600, 800x480p, 640x480p

• Video calibration

These settings allow you to calibrate the User Interface by adjusting the overscan. Use this tool if the image being displayed is too large or too small to fit perfectly to your display.

Simply adjust the screen so that the arrows are in the top left and bottom right corners and that the entire frame is visible on screen.



• Maximum YouTube resolution

Use this setting for limiting the resolution of a YouTube streamed video. If you prefer individual resolutions on different contents choose Ask.

• Turn off display after

Allows you to set the amount of idle time required before the display is turned off.

NOTE:

When your audio output is set to HDMI, the display output will be muted instead of turned off.



• Screensaver after

Allows you to set the amount of idle time required before displaying the screensaver.

• Audio offset in milliseconds (lip-sync)

Adjusts the time the audio is delayed in relation to the video. This setting is useful if you experience that the audio does not match the picture when watching videos.

Aspect Ratio

Allows you to choose how the video is displayed.

Hold the OK button during the video playback and then select the aspect ratio from context menu.

The Aspect ratio options:

- Normal - Movie is displayed so that at least 1 dimension fills the screen. No cropping will occur. Aspect ratio is unaffected.
- Zoom - Movie is zoomed in, and the movie cropped so that there are no black bars on screen. Aspect ratio is unaffected.
- Stretch 4x3 - Movie is stretched to fill a 4x3 frame. Aspect ratio is changed.
- Wide Zoom - Movie is stretched to fill a 14x9 frame. Aspect ratio is changed.
- Stretch 16x9 - Movie is stretched to fill a 16x9 frame. Aspect ratio is changed.
- Original Size - Movie is displayed so that the height (in pixels) displayed is the height of the movie exactly. No zooming is performed. Aspect ratio is unaffected.
- Custom - Movie is displayed using the Zoom and Pixel Ratio settings as defined in the video calibration.

Settings - Firmware

↳ Information

- The information page will show information about the installed firmware and hardware version on your ECM. This section also gives information about new available software versions and provides the option to update your software version if a new version is available.

↳ Reset

- Clear user preferences

This option clears the user preferences without verifying the system. All user settings will be reset to their default values.

- Enter firmware recovery

Troubleshooting

Your ECM has a built in recovery mode, automatically perform the following procedure to force the recovery mode:

1. Turn off power using the power switch on the back of your unit.
2. Turn power back on and wait until the Electrocompaniet logo is displayed on the screen.
3. When the logo is displayed, but before the home screen is displayed: turn power off again.
4. When you turn power back on, the recovery mode will automatically appear.

You will be given 4 choices:

Perform System recovery

System recovery will load the system as it was shipped from the factory and update to latest version (if a wired internet connection is available). Your settings and library will not be reset in this mode.

Perform factory reset

Factory reset will restore the system as it was shipped from the factory and will wipe your stored settings and library (your media files will not be deleted) If a wired internet connection is available, your ECM will update to the latest version. NOTE: all user settings and library will be deleted, but no media files will be deleted.

Clear user settings

This option clears the user preferences without verifying the system. All user settings will be reset to their default values.

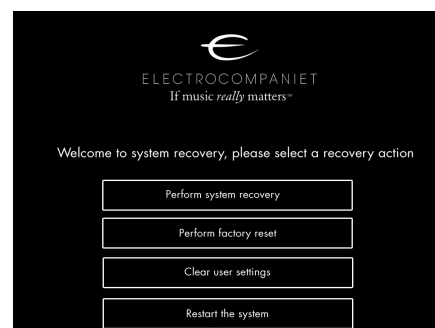
Restart the system

This option will attempt to restart the system, without making any changes.

- If you are experiencing problems with your ECM, please check and verify that all cables (Power cord, Network cable, Audio cables, HDMI cable etc.) are securely plugged into your ECM and other connected equipment such as display/TV, amplifier/receiver, network router etc. Also verify that all connected equipment is turned on and the correct input is selected.

- If you are having problems with your remote, please make sure the remote has a free line of sight to the infrared receiver on ECM. Try replacing the batteries.
- If the problem still persists after checking cables, remote and connected equipment. Please try to power off the ECM using the switch at the back, next to the power inlet. Leave your ECM turned off for a couple of minutes and turn the ECM back on.

- If Internet is not working, please check the status at Setting ->Network ->Information.
- If nothing helps, please contact your local dealer or go to <http://www.electrocompaniet.no/Support/> to contact our support team.



Technical specifications ECM 2

The following technical data were measured on randomized test objects and are typical data.
All measurements are made at 120V / 240V // 50Hz / 60Hz

No. of balanced analog outputs.....	2
No. of unbalanced analog outputs.....	2
Output Impedance.....	300 Ohms
Noise floor (20 - 20 kHz).....	< -145 dB
Frequency response.....	0.5 - 48 kHz
THD+N.....	< 0,0005 %
Upsampling rate.....	192 kHz, 24 bit
Digital/Analog conversion.....	192 kHz, 24 bit
Supported audio formats.....	All popular formats, including: WAV/WAVE, MP3, AAC+, Vorbis, AC3, DTS, ALAC, FLAC, APE, WMA, up to 192kHz/24bit, DSD, up to DSD128 (5.6MHz)
Supported video formats.....	All popular formats, including: MPEG-2, MPEG-4, H.263, MPEG-4 AVC (H.264), up to 1080p with HD 192kHz/24bit audio
Video: 1xHDMI.....	Full HD 1080p
Digital inputs: 2x COAX/ 2x TOSlink.....	192 kHz, 24 bit
Network connection.....	Wi-Fi or LAN
Internet-based sources:.....	YouTube, Internet Radio
Supported control interfaces: DLNA, UPnP, Android and iOS remote	
Internal storage: docking, self installation	
Playback method: memory-based with large buffer, asynchronous, gapless	
Trigger low signal.....	<1V (AC or DC)
Trigger high signal.....	>8V(AC or DC)
Maximum trigger input level.....	20V (AC or DC)
Trigger output level.....	12V DC
Power consumption (no load or signal).....	50 W
Standby.....	0.5 W

Dimensions

Width	465 mm / 18.3 inches
Depth	371 mm / 14.6 inches
Height	78 mm / 3 inches
Weight.....	8.5 kg. / 18.7 lbs

**The manufacturer reserves the right to alter these specifications without further notice.*

Precautions

- Before connecting the AC power cord to the appliance, make sure the voltage designation of the appliance corresponds to the local electrical supply. If you are unsure of your power supply, contact your local power company. The acceptable power input range is AC ~100V-240V, 50/60Hz.
- The player is still receiving power from the AC power source as long as it is connected to the wall outlet, even if the player itself has been turned off.
- Unplug the power cord if you are not going to use the product for an extended period of time. Hold the power switch when unplugging. Do not pull on the cord.
- The power switch is used as the mechanism for cutting off power, therefore make sure it is easy to unplug.
- To ensure proper ventilation around this product, do not place this product on a sofa, bed or rug. When installing this product on a wall or bookshelf, you need to provide appropriate space: we recommend leaving 4 inches (10 cm) of free space at the top, the sides and the rear.
- High temperature will lead to abnormal operation of this unit. Do not expose this unit or batteries to direct sunlight or near other heating objects.
- When moving the player from a cold location to a warm one, or vice versa. Should this occur, the player may not operate properly. In such a case please turn the unit on for 1-2 hours to facilitate moisture evaporation.

Important Safety Instructions

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions. Do not install the unit in a small and closed rack or shelf.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched, particularly at plug, receptacle, and the point where it exits from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 13) 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.
- 14) Batteries (battery pack or batteries installed) shall not be exposed to excessive heat such as sunshine, fire or the like.

Important Notice

Proper ventilation is important. It is important that there is at least 3-5 cm (1-2inches) of air on the left/right side of the ECM and 5-8 cm (2-3 inches) above. Never cover the ventilation area.



Product registration

Please consider registering your product with Electrocompaniet. Registering will make sure you are informed about important information about your Electrocompaniet product, including notifications when a new firmware version is available for your system. Please go to **<http://members.electrocompaniet.no>** register your product.

If Service is needed

Your dealer will have all relevant information regarding the service centers in your area, and will ensure that your unit is serviced with minimum delay. It is our general policy to have your unit returned to you within five working days. This is an average time, and can vary locally, depending on the workload at that particular service station. If, for some reason, there are no service facilities available in your country, please ship the unit to the following address:

Electrocompaniet as,
Breivikveien 7,
N-4120 Tau,
Norway
Web: www.electrocompaniet.no
Service department: www.electrocompaniet.no/Support

The end user is responsible for all shipping charges, insurance, re-importation and duty charges. When shipping a product to the factory for service, always include the following:

1. A sales slip or other proof of purchase if repair is claimed under warranty.
2. A proforma invoice with value of goods, stating that the ECM 2 is returned to Norway for repair.
3. An accompanying letter describing faults, symptoms, or problems with the unit.
4. Always ship the unit in its original carton and packaging material to prevent damage in transit.

Electrocompaniet will not cover damages incurred in transit. If you require further information concerning the operation of the unit, or if you have any questions related to service, please do not hesitate to contact your dealer or your national distributor.

User Manual Updates Online

An updated version of the User Manual may be available online at the Electrocompaniet web site. Occasional updates are needed to reflect new features added to the player since the User Manual was printed. As future firmware updates bring in new features and functions, the online version of the User Manual will be updated accordingly.

Copyright Protection

Reverse engineering or disassembly is prohibited. Part of the software is open-sourced under the GPL license. Please contact us for availability.

IR Remote control codes

RC5 codes are denoted as xx.yy where xx is 5 bit address and yy is 6 bit command/data. All numbers are in decimal.

RC6 codes are denoted as xxx.yyy. xxx is 8 bit address. yyy is 8 bit command code. All numbers in decimal. All RC6 codes are mode 0.

Key label	Code Type	Code Hex	Comments
MUTE	RC5	10.0D	Same as on the integrated- and pre-amplifiers.
STANDBY	RC6	EC.0C	
1	RC6	EC.01	
2	RC6	EC.02	
3	RC6	EC.03	
4	RC6	EC.04	
5	RC6	EC.05	
6	RC6	EC.06	
7	RC6	EC.07	
8	RC6	EC.08	
9	RC6	EC.09	
BACKSPACE	RC6	EC.69	
0	RC6	EC.00	
DIM	RC6	EC.10	
PREV	RC6	EC.21	
PLAY	RC6	EC.2C	
STOP	RC6	EC.31	
NEXT	RC6	EC.20	
PAGE UP	RC6	EC.6E	
PAGE DOWN	RC6	EC.6F	
REPEAT	RC6	EC.1D	
SHUFFLE	RC6	EC.1C	
VOL UP	RC5	10.10	Same as on the integrated- and pre-amplifiers.
VOL DOWN	RC5	10.11	Same as on the integrated- and pre-amplifiers.
GROUP	RC6	EC.64	
VIEW	RC6	EC.65	
SEARCH	RC6	EC.66	
INFO	RC6	EC.67	
LEFT	RC6	EC.5A	
RIGHT	RC6	EC.5B	
UP	RC6	EC.58	
DOWN	RC6	EC.59	
OK	RC6	EC.5C	
BACK	RC6	EC.5D	
HOME	RC6	EC.5E	
COAX1	RC6	EC.12	
COAX2	RC6	EC.13	
TOSLink1	RC6	EC.0A	
TOSLink2	RC6	EC.0B	
SUBTITLE	RC6	EC.4B	
DISPLAY	RC6	EC.48	
ZOOM	RC6	EC.F7	
AUDIO	RC6	EC.4E	
TOP MENU	RC6	EC.83	
MENU	RC6	EC.54	



ELECTROCOMPANIET
If music *really* matters™

DEALER
STICKER
HERE

LOCAL DEALER

Warning!

To avoid risk of fire or electric shock, do not expose this appliance to rain or moisture.
Verify line voltage before use.
Do not remove cover. No user serviceable parts inside.
Refer servicing to qualified service personnel.
The warranty is void if the product is tampered with by non-authorized personnel.
Use only authorized Electrocompaniet service center.

Made in Norway
www.electrocompaniet.no