



ELECTROCOMPANIET

If music really matters...



# EMP - 1

## Owner's manual

**Note !**

**This manual is under construction  
Please download the latest version from  
[www.electrocompaniet.no/Manuals.html](http://www.electrocompaniet.no/Manuals.html)**

# **Owner's manual**

## **EMP 1 Reference Multi Player**

**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 personal.

The warranty is void if non-authorized personnel tamper with the product. Use only authorized Electrocompaniet service center.

## **Design concept and audio philosophy:**

Thank you for purchasing this fine audio equipment. First of all we will give you a small introduction to the ideas behind the EMP-1

Technically, a cd (or a DVD) is a simple construction, built up with a lot of digital information, represented by only two states - zero or one. The main work for the first section of the EMP-1 is to read this information. The EMP-1 have a buffer that reads from the CD with a higher speed than necessary. If there is some inconsistent information the system has time to read it again, and correct the missing data. With this technique errors introduced by the CD mechanics are removed. As long as the first stage of the process has a perfect copy of the information on the CD there is a basis for the next stage.

The next stage is to sample rate the information. This process removes most of the jitter and also makes sure that all parts of the DAC get the correct information., at correct time.

The last step is to convert the digital signal into an analog signal. This is done in two stages. First the PCM signal is up sampled to 192kHz. This signal is then up sampled again to an 312kHz if selected in the setup. After this the High Qualities DAC converted the digital information to an analog signal.

After this process the signal passes trough the fully balanced, symmetrical, state-of-the-art internal analog output stage - ready to be connected to your system.

## **Unpacking the EMP 1**

Immediately upon receipt of the EMP 1, inspect the carton for possible damage during shipment.

The carton and packaging have been designed to provide the safest possible protection for transport of this player.

Unpack the unit carefully. Save all packaging materials for future shipment.

## **The contents of the carton**

1 pcs Electrocompaniet EMP 1 – Universal Player

1 pcs AC mains cord.

1 pcs Inspection card.

1 pcs Remote control

2 pcs Batteries

The EMP 1 are designed to be used together with the new ECT-2, the advanced RF remote controller, sold as a separate product. However, if you do not have this unit we have included a standard IR controller.

## **Set up procedure**

Before connecting the EMP 1 to the mains, check that the main voltage indicated on the rear panel corresponds to the line voltage in the territory where you intend to use the unit.

## **How to avoid damages**

Do not under any circumstances connect or disconnect equipment when power is turned on.

## **How to avoid noise problems**

The EMP 1 contains delicate circuits that are sensitive to magnetic stray fields.

The unit should not be placed near main transformers, TV sets, etc. Care should also be taken regarding placement of the interconnect cables. Do not run interconnect cables in parallel with main cords or speaker cables. Keep interconnect cables as short as possible.

## **How to power up your system**

You should always power up your system the following way:

- 1- Signal sources first.
- 2- Preamplifier
- 3- Power amplifier(s)

## **How to power down your system**

When switching off your system:

- 1- Start with the Power amplifier(s)
- 2- The preamplifier
- 3- The signal sources.

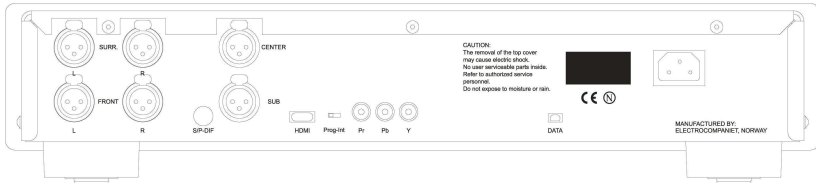
## **Important notes**

For optimal sonic performance, the EMP 1 should be burned in for a minimum time of 72 hours. The easiest way to burn in your EMP 1 is to put a disc in REPEAT mode with the rest of your system turned off.

In daily operation, switch off the EMP 1 player by using the STANDBY button on the remote. If the EMP 1 has been switched off, allow two hours of warm-up to optimize sonic performance.

Due to high class A operation in all Electrocompaniet designs, it is normal for the EMP 1 to feel warm. Proper ventilation is important. The EMP 1 should never be completely covered. A good rule of thumb is to allow at least 3 – 5 cm of air sidewise and 5 – 8 cm above the EMP 1. If placed into a cabinet make sure you have proper ventilation.

## Connecting the EMP 1



### Analog

Connect the left output to the left input on the preamplifier or the integrated amplifier. Connect the right output to the right input on the preamplifier or the integrated amplifier. Connect the Center, Subwoofer, and Surround left/right if you want to use the EMP 1 in a surround setup.

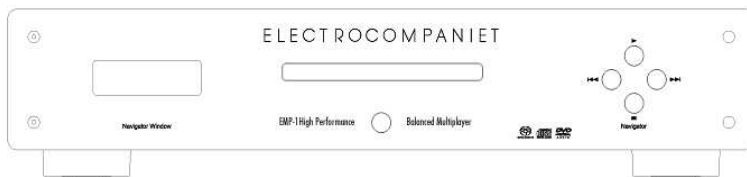
### Digital Output

Connect a 75 Ohm unbalanced digital signal cable from S/P-DIF to the digital input on the preamplifier or the integrated amplifier.

### Mains

Check that the mains voltage printed on the rear panel corresponds with the line voltage in the territory you intend to use the EMP 1. After this is checked out, connect the AC main cord to the power inlet on the rear side.

## Front panel controls



The power on/off button is localized in the center of the front panel. Generally, we recommend that you use the Standby button located on the remote control.

When not using the EMP 1 for a long period, turn the main switch off and disconnect the unit from the mains outlet.

The four navigator buttons on the right front panel have the following functions:

Top button = play/pause

Right button = next

Left button = previous

Lower button = stop / eject – hold the button pressed to eject the disc.



## **Using the ECT 2 remote control (sold separately)**

Before you can use the ECT 2, you have to connect the ECT 2 to the EMP 1.

Follow these steps to connect the ECT 2:

1. Turn off the EMP 1
2. Press and hold the **lower button** on the front panel, and turn on the EMP 1.
3. The display will show “Searching for remote”
4. Press and hold the **Select and Device** buttons on the remote control for a couple of seconds.
5. The display on the EMP 1 will change to “Device found”
6. Restart the EMP 1. I.e. turn off the EMP 1 and wait for 5 seconds before you turn on the EMP 1 again.

## **Controlling the EMP 1 with the ECT 2 remote control:**

Press the **Device** button until the display on the ECT 2 shows “Multiplayer”.

Use the joystick to control the EMP 1:

Joystick up = play/pause

Joystick right = next

Joystick left = previous

Joystick down = stop. Hold the joystick down for some second eject the disc.

**Please read the manual for the ECT-2 for more information about controlling the EMP-1**

## Technical data

Output impedance		100 ohm
Output level	Balanced, 0dBFs	4.5Vrms
Noise floor	20 - 20 kHz	< - 130 dB
Frequency deviation	20 - 20 kHz	< 0.05 dB
Channel separation		> 110 dB
THD + N	20 - 20 kHz	< 0.002%
IMD		TBD
Digital/Analog Conversion		24 bit, 192 kHz
Compatible formats		CD, HDCD, SACD, DVD, MP3, SVCD, VCD, WMA, DIVX, Picture CD, JPEG
Dynamic Range		120 dB
Dimensions	W x D x H	483 x 410 x 75 mm 19 x 16.1 x 3 inches
Weight		14 kg
Power consumption	No load or signal	40 W
Audio Outputs		6 ch. balanced line out (XLR)
Digital Outputs		75 ohm S/PDIF RCA

Specifications are subject to change without further notice.

## **If service is needed**

Your dealer will have all relevant information regarding the service center in your area and will ensure that your unit is serviced with minimum delay.

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,  
4120 TAU,  
NORWAY**

Switchboard: +47 51 74 10 33 Fax: +47 51 74 10 10 Service:  
+47 51 74 10 23

E-mail: [sales@electrocompaniet.no](mailto:sales@electrocompaniet.no)

Web: [www.electrocompaniet.no](http://www.electrocompaniet.no)

Service department: [service@electrocompaniet.no](mailto:service@electrocompaniet.no)

The end-user is responsible for all shipping charges, insurance, and 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 amplifier is being 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.