



## ECI 6D

Balanced Integrated Amplifier

(with a built-in DAC)

Owner's Manual





## Unpacking the ECI 6D

Immediately upon receipt of the ECI 6D, inspect the carton for possible damage during shipment. The carton and packaging have been designed to provide the safest possible protection for transport of your integrated amplifier. Unpack the unit carefully. Save all packaging materials for future shipment.

#### The contents of the carton

- 1 pc. Electrocompaniet ECI 6D integrated amplifier.
- 1 pc. AC main cord.
- 1 pc. Spare main fuse (located in the fuse drawer).
- 1 pc. Inspection card.
- 1 pc. CD with the owner's manual and drivers.
- 1 pc. IR Remote control
- 2 pcs. Batteries

#### Set up procedure

Before connecting the ECI 6D to the AC Power outlet, check that the main voltage indicated on the rear panel corresponds to the line voltage in the country were you intend to use the unit.

## How to avoid damages

Do not under any circumstances connect or disconnect equipment when power is turned on. The design of the RCA plug generates a huge transient when inserted. Connecting or disconnecting equipment with the power on can result in severe damage to both speakers and amplifier.

#### How to avoid noise problems

The ECI 6D contains delicate circuits that are sensitive to magnetic stray fields. The unit should not be placed near power voltage 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 avoid possible antenna problems

In some set-ups hum may occur when you connect the radio, VCR or TV to your system. The problem is caused by DC voltage coming from your antenna. Please contact your cable network operator.



#### How to connect your system

Please read this page carefully and follow, page 11-12 as reference.

## Balanced XLR input and operation

The balanced mode can only be used if the signal source has a balanced output. Use an XLR interconnect with GND on pin 1, + on pin2, and - on pin 3. To use the balanced input with a source single ended, connect the ECP5XLR in the XLR

## Single ended RCA input and operation:

The left channel is the top row on the rear, marked black. All inputs are similar regarding sonic performance. Unused inputs may be shorted to ground, using a RCA shorting plug.

## HT (Home Theatre)

HT is a direct input where the volume control is bypassed. ECI 6D will work like a power amplifier with fixed gain. When selected the output will be muted for a few seconds as a safety against accidental overload.

#### Preamp out:

The preamp out is dependent on the volume control setting, and MUTE function. These outputs (balanced and single ended) can be used to control an additional power amplifier.

## Speaker output:

Never short the positive output to ground or chassis. Switch the amplifier off when connecting the speakers.

### How to power up your system

You should always power up your system the following way: Signal sources (CD player, tuner etc.) first. Allow a 30 seconds warm-up before you turn on the ECI 6D.

## When switching off your system

Start with the ECI 6D, then the signal sources. If the preamplifier output is connected to a power amplifier, then turn off the power before or at the same time as ECI 6D.



#### SPDIF inputs

ECI 6D will accept optical SPDIF sources up to 96 kHz/24bit on inputs TOSLink1 and TOSLink2. Please use a optical TOSLink cable for this connection. Connect coaxial sources up to 192kHz/24bit to inputs COAX1 and COAX2. Please use a coaxial SPDIF cable for this connection.

#### 12V trigger Input/Output

The 12V trigger output may be used to automatically power up a CD-player (or other equipment with 12V trigger input) when ECI 6D is powered up. When ECI 6D powers up the 12V trigger output will be set to 12V and will support up to 75 mA current output. Please keep the current draw below 75 mA by limiting the number of devices connected to the 12V trigger output.

The ECI 6D will power up (leave standby) when a voltage in range 8-20V (AC or DC) is present on the 12V trigger input, and stays powered on for as long as the voltage is present. The current draw at the 12V trigger input is 3.3mA.

#### RS-232 Control Port

The RS-232 control port may be used in home installation setups or general usage for controlling basic functionality on the ECI 6D. Please refer to document "ECI6DS RS232 Command Reference V1.pdf" for further information. This document may be downloaded from www.electrocompaniet.no



## Navigator window

Audio Source	Display Text	Description
CD	CD	Analog balanced XLR input
AUX	AUX	Analog single-ended RCA input
DVD	DVD	Analog single-ended RCA input
HT	HT	Analog single-ended home theater RCA input
COAX 1	COAX1	Coaxial S/PDIF input up to 192 kHz/24 bit
COAX 2	COAX2	Coaxial S/PDIF input up to 192 kHz/24 bit
TosLink 1	TOSLNK1	Optical S/PDIF input up to 96 kHz/24 bit
TosLink 2	TOSLNK2	Optical S/PDIF input up to 96 kHz/24 bit
USB	USB	Asynchronous High Speed USB 2.0 input up to 192kHz/24bit

## Front panel (see illustration, page 9)

The main switch is located in the center of the lower part of the front panel. In daily operation, switch off the ECI 6D by press and hold the Mute button on the remote control (see page 13). If the ECI 6D has been switched off, allow two hours of warm-up for optimal sonic performance. When the ECI 6D is not to be used for a long period of time, use the main switch to turn the unit off. Then disconnect the AC main cord for maximum safety.

### **Navigator**

Button	Function	Description
UP	Volume Up	Increases the volume level.
DOWN	Volume Down	Decreases the volume level.
LEFT	Select source left	Selects the next source to the left.
RIGHT	Select source right	Selects the next source to the right.



#### Error codes

If the ECI 6D is not working properly, the display will show an error code.

The error codes are:

Display Error text	Description	What to do
DC FAULT LEFT	DC voltage left channel	Please contact service center.
DC FAULT RIGHT	DC voltage right channel	
DC	DC left + right channels	
OVERLOAD FAULT LEFT	Overload of left channel	Make sure that the + and – leads of the loudspeaker cables are
OVERLOAD FAULT RIGHT	Overload right channel	not shorted, and that the speaker cables are not in contact with the chassis of ECI 6D.
OVRLOAD	Overload left+right chan- nels	
TEMPERATURE	Over temperature left+right channel	The amplifier is overheated. This is caused by either playing to loud for a long period of time, or not enough free space on the sides or above the ECI 6D. Turn down the volume and make sure there is enough free space around the amplifier.

For troubleshooting please contact your local dealer or our support department. All contact information you will find at www.electrocompaniet.no



## Replacing a blown main fuse

The main fuse is located in a small drawer inside the AC inlet of the unit. If, for some reason the fuse is blown, turn the unit off, and remove the AC cord from the AC inlet. Open the drawer with a small screwdriver and remove the blown fuse. The spare fuse is located inside a holder in front of the main fuse.

- 1. Remove the spare fuse gently by pushing it sideways out of its holder.
- 2. Insert the spare fuse as the active fuse.
- 3. Push the drawer gently back to closed position.
- 4. Re-insert the AC cord and turn the unit on.

#### Never replace the fuse with another value than indicated on the unit!

## Input configurations

```
XLR input: 1 = ground 2 = positive 3 = negative RCA: Center = positive Circle = ground.
```

## Output configurations

```
XLR output: 1 = ground 2 = positive 3 = negative
Speaker: Red = positive Black or White = ground
```

#### ECP5XLR:

RCA to XLR adapter: 1 & 3; ground and negative = shorted 2 = positive

### Updating the ECI 6D firmware

Please download the update instruction from our website at: "Downloads - Firmware" area.



## Technical specifications ECI 6D:

The following technical data were measured on randomized test objects and are typical data. All measurements are made at 120V / 240V // 50Hz / 60Hz. Clipping point of the amplifier is set to a level where total harmonic distortion (THD) is 0.2 %.

Preamp	lifier	section
I I CUIIID	111161	36011011

Input impedance (Balanced input)	47 kOhm
Noise floor (1Vrms, 20 - 20 kHz, balanced)	
THD + N (1Vrms, 20 - 20 kHz, balanced)	
Gain (Balanced)	

## Amplifier section

Output Impedance	< 0.02 Ohm
Frequency response (- 3 dB)	
Channel separation	
THD + N (20 - 20 kHz)	< 0,004%
Maximum peak current	
Damping factor (8 ohm load)	
Input sensitivity (125W output)	
Input sensitivity HT (125W output)	
Gain HT (input)	

SPDIF inputs	2 x Coax, 2 x TOSLink
USB	1x 192kHz/24bit

#### Rated output power

 $10\ \%$  change in line voltage will give approximately  $20\ \%$  change in output power.

8 Ohm	2 × 200 W
Power consumption (no load or signal)	110 W

## Standby......1W

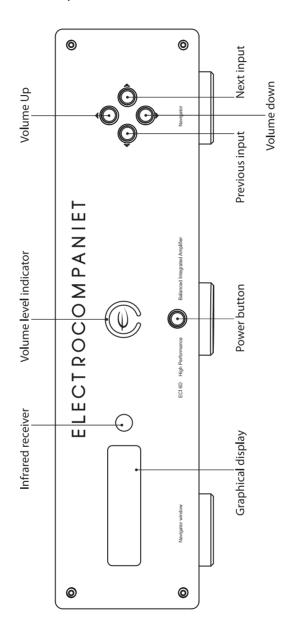
#### **Dimensions**

Width: 483 mm - 19 inch Depth: 405 mm - 16 inch Height: 135 mm - 5,3 inch Weight: 20 Kg - 44 lbs

<sup>\*</sup>Specifications are subject to change without further notice.

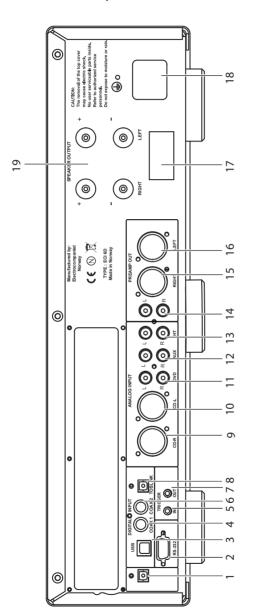


## ECI 6D Front panel illustration





## ECI 6D Rear panel illustration



Optical digital input, TOSLink 1

2. RS 232 connection

3. USB audio input

- 12. AUX analog inputs 13. Home theater analog inputs
- 15. Pre-amplifier Balanced analog right output 14. Pre-amplifier analog output
- 16. Pre-amplifier Balanced analog left output17. Serial number18. AC Power Inlet19. Speaker outputs

9. Balanced analog right CD input 10. Balanced analog left CD input

8. Optical digital input 2, TOSLink 2

6. Coaxial digital input 2 7. 12 V trigger output

Coaxial digital input

4. 7.

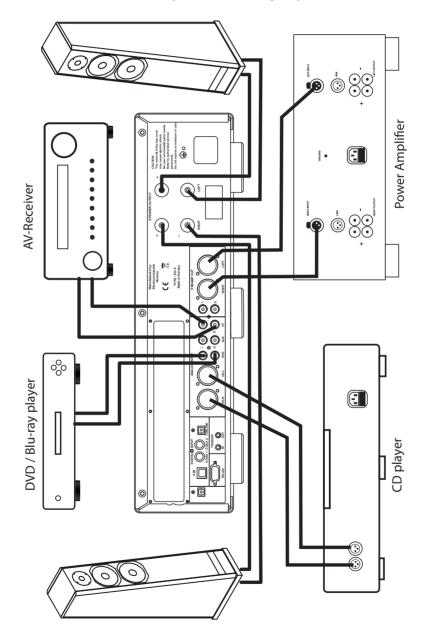
12 V trigger input

11. DVD analog inputs

10

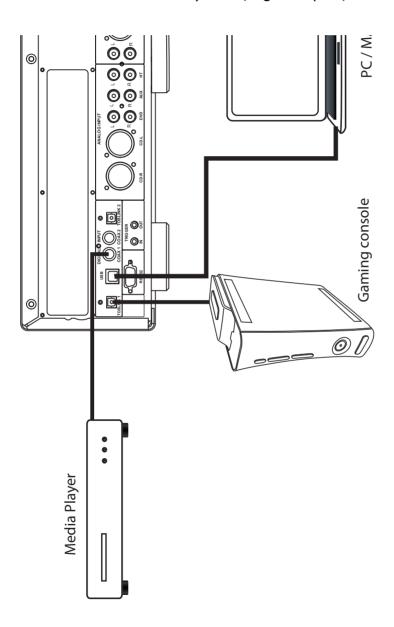


## How to connect the system (Analog Inputs)



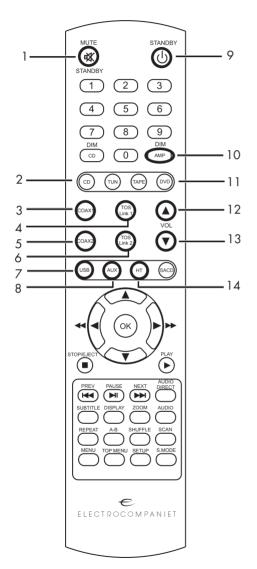


## How to connect the system (Digital Inputs)





#### Remote control



1. Mute - on/off.

Standby mode - hold mute 1-2 sec. to set the ECI 6D into a standby mode.

- 2. CD switch to CD input
- 3. COAX1 switch to COAX 1 input.
- 4. TosLink1 switch to Toslink1 input.
- 5. COAX 2 switch to COAX 2 input.
- 6. TosLink2 switch to Toslink2 input.
- 7. USB switch to USB input.
- 8. AUX switch to AUX input.
- 9. Standby <u>not in use with the amplifiers.</u>
  Work as Standby with a players.
- 10. Dim dimming the amplifiers display.
- 11. Volume up increase the volume.
- 12. Volume down decrease the volume.
- 13. HT switch to a Home theater input.



#### Important Notice

For optimal sonic performance, the ECI 6D should be burned in for a minimum time of 72 hours. The easiest way to burn in your ECI 6D is to put a signal at any input, without the speakers connected In daily operation, switch off the ECI 6D by using the MUTE button on the remote control. If the ECI 6D has been switched off, allow two hours of warm-up to optimal sonic performance. Due to high class A operation in all Electrocompaniet designs, it is normal for the ECI 6D to feel warm. Proper ventilation is important. It is important that there is at least 3-5 cm (1-2 inches) of air on the left side of the amplifier and 5-8 cm (2-3 inches) above. Never cover the ventilation area.

#### 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.com

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 amplifier 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.



# 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 personal.

The warranty is void if the product is tampered with by non-authorised personnel.

Use only authorized Electrocompaniet service center.

Made in Norway
www.electrocompaniet.no