

# TEST: Elac Element Series EA 101EQ-G - Integrated amplifier with app operation and room measurement



from Volker Frech  
editor



Departure to new shores: The sound converter specialist Elac now enters the field of amplification - and dares with the Elac EA 101EQ-G directly a double-balancing act: The compact small power plant is to reconcile classic analog hi-fi and digital modern, promises the Kiel Klangschmiede audiophile sound quality at an unbeatable price. Great sounds - even from the small amp?



*Chic and sleek: The Elac EA 101EQ-G is stylishly styled and equipped.*

Something is happening at Elac: The North German hi-fi manufacturer is working on broadening the product portfolio. With the turntable Miracord 90 Anniversary, the long-established company celebrated its anniversary last year with the [Discovery Music Server](#) it is dedicated to the topic of streaming. Both products prove that the people of Kiel have their fingers on the pulse of the times. Now Elac positions itself with the integrated amplifier EA 101EQ-G in the next division and is also on topicality here. The amp is equipped with digital interfaces and features a feature phalanx: automatic room metering, intelligent DSP crossover to integrate a subwoofer, Dolby Digital decoder for TV use, headphone output for discrete music enjoyment. In addition, the amp shines with its own app for comfortable setup and control. A sumptuous equipment - and Elac

calls the startling price of 699 euros. There are many reasons to take a closer look at this multi-talented person.



*The case is also styled: in the top is a matte black rubber in the honeycomb look embedded, which ensures a sporty look and a grippy feel.*



## Stylish half format

Very chic! - This is the first impression when the Elac EA 101EQ-G arrives at our editorial office. The amplifier is flat and slim, so it is a trend towards a compact complete solution, which replaces the spacious hi-fi tower in several living rooms. That's why the half format, that is half the width of the usual 43 centimeter front, is back in business. The design of the EA 101EQ-G is brushed in a modern style - and in the truest sense of the word: The front of the amplifier is made of brushed aluminum, the massive front panel runs with a gentle curve to the area of the cheeks. This design is repeated on the back, the black amplifier body receives thereby a noble enclosure. Back to the front: From the gently shimmering front stands out the glossy-smooth volume control, The metal wheel detaches haptically what it promises visually: It runs beautifully supple and with a pleasant detent. The volume control is the only mechanical control on the entire device, everything else runs on the second striking front feature, which is designed as a black band

display. This ad has it all: Here is a headphone jack embedded, and indeed for large jack. Great, after all, most of the good headphones are equipped with 6.3-millimeter plugs. Two sensor fields are also integrated in the display. Buttons were yesterday, touch buttons are cooler, and so you wake the Elac EA101EQ-G with a gentle touch to life. This also activates the display: an OLED display. On the one hand, it looks more valuable and stylish than the normal LED displays and, on the other hand, provides a sharper image. First we will know which volume is set and then which source is selected. This selection is now changed with the second sensor button - and this leads us to seven channels.



*The glossy volume wheel is the only classic control on the Elac EA 101EQ-G.*

## **Inputs and interfaces for music and film**

What the Elac EA101EQ-G is all about, shows us the back: Here we find a well-assorted range of connectivity options. Two line-level inputs provide access to all analog sources, ensuring that even owners of classic hi-fi components will not lose touch. But then it is already digital: The Elac EA 101EQ-G comes with two optical TOSLink inputs, as an alternative offers an electrical coaxial RCA input. Using these three S / PDIF interfaces, the amplifier can process high-resolution PCM files up to a HiRes quality of 192 kHz and 24 bits. For the optical input, however, it depends on the quality of the player and the length of the fiber-optic cable, whether this maximum Quality is achieved. In addition to the PCM format, these three interfaces also receive Dolby Digital data, the Elac EA 101EQ-G has a corresponding decoder. This is smart, because it cooperates with the amplifier, the amplifier, even if the flatscreen no PCM sound can spend. Thus, the Elac amp also ensures official film sound. The three S / PDIF interfaces are now joined by a USB-B input for connecting a computer or laptop, this interface can also work with high-resolution PCM

signals up to 192 kHz / 24 bit. If you do not want to control the Elac EA 101EQ-G via wire, you will select the radio connection: The amplifier allows streaming via Bluetooth to play music from your mobile phone or tablet - and in really good quality. The integrated Bluetooth module supports the codec aptX, this is now the gold standard in bluetooth radio of audio files. Here, however, the player must play along and have aptX in the portfolio.



*With two analogue inputs and four digital interfaces plus Bluetooth, the Elac EA 101EQ-G provides connections for classic hi-fi and modern players.*

## Clever power management

What is the Elac EA 101EQ-G now doing with all these signals? Clear: walk, edit and amplify. Let's start with the core competence of the amp, here Elac focuses on a specialty: Under the hood is a newly developed BASH full range amplifier. BASH stands for Bridged Amplifier Switching Hybrid, an amplifier concept that combines the sonic merits of a Class AB amp with the efficiency of a switched-mode power supply, providing low-distortion signal amplification and low heat losses. This is achieved through ultra-fast energy management: the incoming audio signal is checked 400,000 times per second for its amplitude, then the power supply provides the amplifier with the ideal supply voltage. This amplifier technology is often used in active subwoofers, Elac now uses the clever BASH concept for complete signal amplification. In the EA 101EQ-G, the hybrid amp delivers a whopping 80 watts into four ohms - however: Powerline amplifiers have considerable power reserves due to their efficient power management, so one should not underestimate the level of power the EA 101EQ-G provides on the speaker output. Here he offers four pole terminals, they have a decent quality and harmonize because of their compact dimensions with the slim appearance of the amplifier. Loudspeaker cables with banana plugs fit perfectly, with cable lugs it fits very well, whoever wants to insert bare strands has no problems with smaller cross sections. And with large cross sections? Here Elac has thought and supplies as an accessory four massive gold-plated banana plugs, which can also absorb strong strands. That is very well

solved. The pole terminals are joined by another output: a subwoofer can be connected via the sub-out - and that puts us in the two co-competences of the Elac EA 101EQ-G.

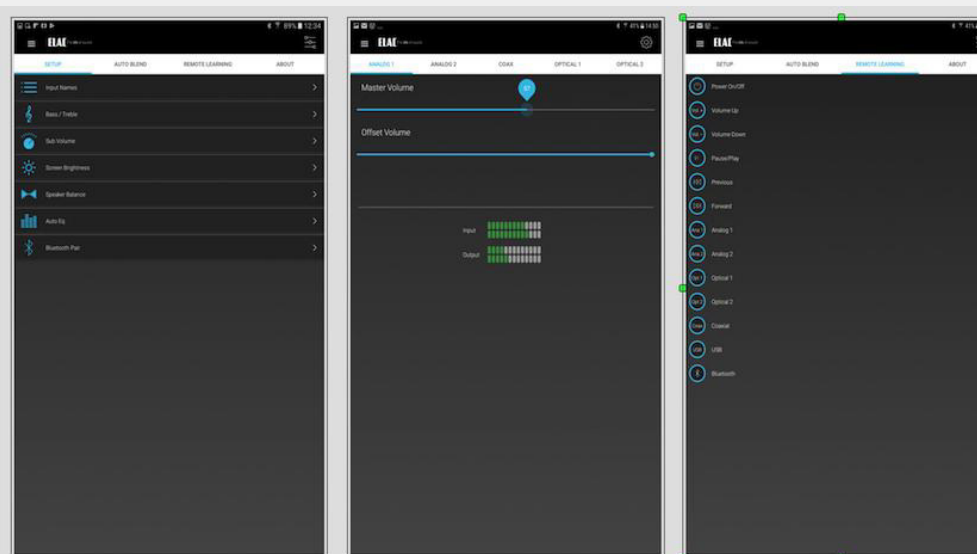


*Four solid terminals are available for connecting the speakers. For larger cable cross-sections, Elac supplies massive gold-plated banana plugs, so you can also connect cables with large cross-sections. The strand is inserted laterally and clamped with a knurled screw.*

## Room measurement and sound management

This amp not only has a clever power management, it also offers an amazing sound management with its digital sound processor, which is second to none in this price range. Elac calls it "ABC technology", the abbreviation stands for "Auto Blend & Calibrate" and actually consists of two parts. On the one hand there is the automatic measurement, it registers the characteristics of the loudspeakers and the room and calculates from these conditions a customized sound profile, which neutralizes these influences in favor of a linear frequency response and optimizes them for the listening position. Calibration also includes a subwoofer that may be present to determine the optimum subwoofer crossover frequency. That's already part of the "ABC technology": The "Auto Blend" function ensures a harmonious integration of the subwoofer, through the DSP-controlled crossover creates a harmonious sound in interaction with two smaller speakers. Such a 2.1 system lends itself to smaller rooms. But it is also a solution for people who want compact speakers to a compact amplifier consequently, but do not want to give up a fat bass. The responsible subwoofer can be placed in a visually inconspicuous place, and the sub-location is included in the "Auto Blend & Calibrate". A big plus: Elac has spared no effort to make the calibration and operation very easy. 1 system is suitable for smaller

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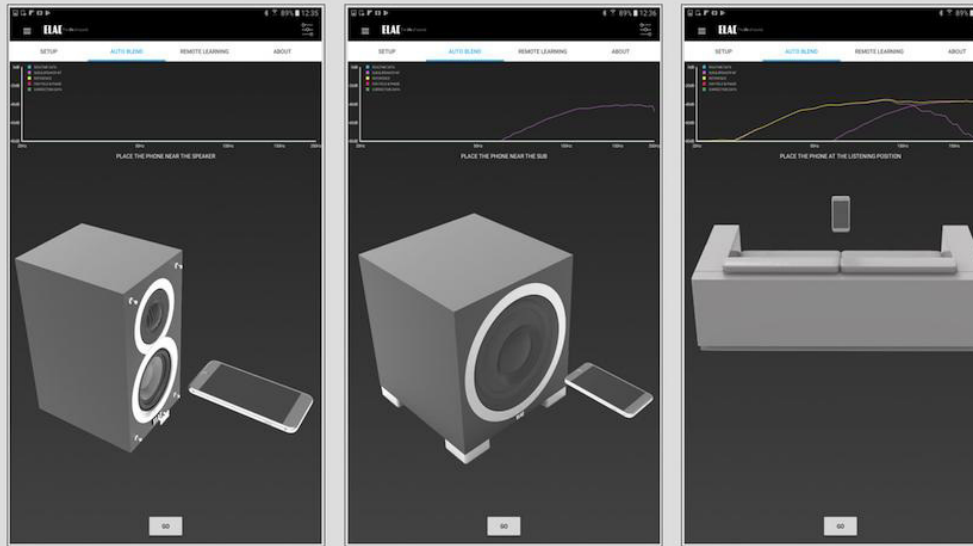


*App to the amp: The Elac EA 101EQ-G can be conveniently operated via smartphone or tablet. In addition to the overall volume, you can also set the level for each source to level differences. Smart: The amplifier can even learn commands from other remote controls via the app.*

## Amp app for complete comfort

For the operation of the Elac EA 101EQ-G there is a handy and clear remote control, but it only allows the basic functions, so source selection, loud / quiet, on / standby, this can be a Bluetooth-connected player with four commands (Start / Pause , previous track, next track). This commander will be quickly put aside, because the full range of functions and comfort of the amplifier can only be experienced with the "EA101EQ-G" -App, which is specially designed for this amp. It is available free of charge for iOS on the App Store and for Adroid on the Play Store. This user interface is visually very appealing, making the operation a comfortable child's play. In addition to the basic settings, the app offers a number of sophisticated functions. This allows you to set your own basic volume for each connected source in order to be able to adjust the levels of the players. The sound control also offers finesse: In addition to treble

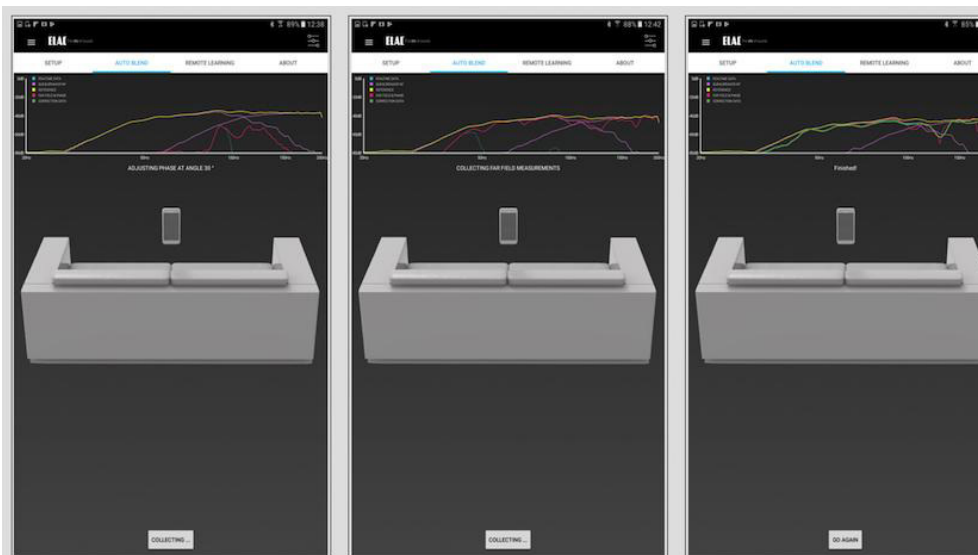
and bass, the volume of the integrated subwoofer can be adjusted separately, thereby making a sound adjustment in various ways. Another class feature: "Remote Learning" allows the amplifier to even learn the infrared codes from other remote controls. This proves to be a smart relief, for example, because the TV remote control can now also control the amplifier. Of course, in the amp app, a really big cinema is the setup of the amplifier, including automatic room measurement: The individual steps are explained and visualized on the screen of the smartphone or tablet.



*The measurement is very easy, the app performs exemplary through the individual steps of the "Auto Blend & Calibrate" process. First, the signals of the satellites and the subwoofer are recorded - individually in a near-field measurement, then altogether at the listening position ...*

## The Elac EA101EQ-G sets up

Of course, we wanted to see how the EA101EQ-G got a good 2.1 setup, so we ordered the Elac Uni-Fi BS U5 for our test, as bass cube we choose the active small subwoofer S.0 from Sumiko with the [QED Performance subwoofer cable](#). As a player on the one hand, the [CD / SACD player CD-S2100 from Yamaha](#) to the course, on the other hand, the [Streamer Discovery DS-S101-G from Elac](#), As far as the hardware, now comes the software. The setup of the amp via the app goes smoothly: The program first asks if you even have a subwoofer; if this is not the case, the next step is to measure the main speakers directly. However, if, like us, a subwoofer is to be included, the system asks for the desired crossover frequency, in the simple mode, three choices - 100 hertz, 80 hertz and 60 hertz - specified, in advanced mode for advanced you can use a slider set freely within this bandwidth. How to choose the 100 hertz option for our small S.0. In the next step, we can name our sound transducers, but this step must only those companies who want to post later on Facebook and Co. their new achievement.



*... then the best phase for the subwoofer signal is determined and analyzed the entire audio signal in order to finally be able to make a sound correction. The individual results are each depicted as a frequency diagram.*

The microphone of the mobile phone or tablet is now aimed at a small distance on one of the main speakers, then it starts: The app sends test tones on the speakers, thereby the calibration software can recognize the playback characteristics of the speaker. The whole thing is repeated in the next step for the subwoofer. From this data, the software calculates the best task distribution for a straightforward frequency response and a neutral reproduction of the 2.1 system. Now the room influence as well as the phase position of the subwoofer is measured at the listening position. This can lead to shifts, if the satellites and the sub have a different distance from the sofa. The optimum phase position of the sub-signal is therefore determined in several passes with test tones. That's it, the calibration is now complete. The best way to measure in quiet environment, although the system can also calculate noise. We have tested this against our will, just in time for the calibration, we began to produce wood using a chainsaw in front of our office. We repeated the calibration later and achieved an almost identical result.

If you're really into English, you can have yourself measured by Elac's renowned US chief developer Andrew Jones, and he will present the [video presentation on the Elac homepage](#) . His tip: If you adjust the volume of the subwoofer to about 70% when measuring, you have a little more leeway afterwards, if you want more or less bass than the measurement recommends.





*Excellent partners from the same house: Our satellites in our test are the Elac Uni-Fi BS U5. The Uni-Fi series was designed by Andrew Jones, one of the world's best-known speaker developers. The compact box Uni-Fi BS U5 confirms its dazzling reputation: The small bass reflex box is a complete 3-way speaker with a coaxial high / midrange chassis, which ensures a very even sound radiation. In conjunction with the 13-centimeter bass driver, the Uni-Fi BS U5 plays from 46 to 25,000 hertz. In the test, this well-made, 349 euros per piece of expensive speakers offered an excellent performance - and we were so impressed that we want to devote him soon to their own test.*

### **That's what the Elac EA 101EQ-G sounds like**

After setting up and warming up the sound chain you can start. At the beginning we started the new recording of Kraftwerk "Die Mensch-Maschine", it is on the brand new eight CD box "3-D. The catalog "to find. Ralf Hütter's Kling Klang Studio-Tüftler have created a terrific sound robe for this recording, and our ensemble under the direction of the Elac EA101EQ-G shows what it can do with this top material. The introduction to the "The Man Machine" robot voice and the synthesizer-sphere sounds is breathtaking: Kraftwerk has put us in a sound-cathedral, as if enveloped by the voice and can be heard through the ear into the dark depth of the room trace. With eyes closed, the illusion is as good as perfect - and that's also because of the extremely detailed reproduction. The Elac EA101EQ-G delivers even the finest sound reflections that are so important to our sense of space. The higher the resolution and the information density, the more perfect is the three-dimensional impression. This has a certain addictive potential, we have listened to the beginning of four times, each time a little louder, to sink deeper and deeper into the room. Great! All the harder hit us then the bone-dry clicking clicks that lay the rhythmic carpet for the synthesizer

theme until the "The Man Machine" unfolds and now also comes up with a broadly concreted bass foundation. The bass is too decent for us after the room measurement, no problem, the app we can either strengthen the bass on the equalizer or strengthen the increase of the "Sub Volume". We choose the second way - and while we're optimizing the sound, let's test the influence of the "Auto Blend" control of the Elac EA101EQ-G. Without it sounds good, but with activated "Auto Blend" wins the just a bit queasy bass noticeably on Kontour, which also benefits the lower mids, the entire sound now appears clearer. Of course, this is a must with accurate music by Kraftwerk, so "Auto Blend" stays on.



*First-class workmanship: The solid front extends to the cheek area, here it is clean and bolted flush with the case.*

Now let's play with the "Auto EQ", here is the gain also clear: The sound has now a bit more pressure, the grip is greater, the music addresses us more directly. So: "Auto EQ" stays on. The effect of these tools is also confirmed in less artificial music: the singer Gregory Porter stands for handmade soul jazz, in his superbly recorded hit "Musical Genocide", the Elac EA101EQ-G puts the singer and his combo in the listening room very nicely staggered : Porter sings centrally in the foreground directly and stands directly in front of us, to the side then the piano and the winds, finally the bass and the drums - an official illustration! The punch is also right: The EA101EQ-G brings the pressure that the band builds up in this recording with ease on the imaginary stage. For this ease it takes power and reserves, in this recording, the amplifier proves both. The playback is therefore still very open even at high volumes, just the tingling in the feet gives us to consider that now already vibrates the ground. The Elac EA101EQ also brings our Suwoofer neat to work. Very impressive, what makes this little amplifier - and that works in another set-up. We are out of curiosity with the What this little amp does - and it works in a different

set-up. We are out of curiosity with the What this little amp does - and it works in a different set-up. We are out of curiosity with the [Canton Vento 890.2 DC](#) large, demanding boxes clamped and set up. Here is the Elac EA101EQ-G also sovereign - but: With the Elac Uni-Fi BS U5, the result is consistent, so the playback sounds absolutely harmonious.



*Tidy: Instead of large towers and powerful sound columns, small components make their way into the living room. The Elac EA 101EQ-G is used in conjunction with bookshelf speakers and subwoofers, and the Elac Discovery Music Server is a modern player.*

## Conclusion

The Elac EA101EQ-G is a complete amplifier with full control: The stylish compact compact power station delivers 80 watts, offers plenty of reserves through its BASH amplifier and thus delivers a surprisingly high-sounding and high-level performance. Thanks to the analogue inputs and the digital interfaces, classic hi-fi and modern media playback are compatible with HiRes files up to PCM 192 kHz / 24 bit. Optimum playback is ensured by a separate calibration system and a DSP-controlled crossover, which guarantees optimum integration of a subwoofer. The icing on the cake is the convenient operation of the Elac EA101EQ-G via its own app. This equipment is just as extraordinary for an amp in this price range as the excellent sound quality: Yes, the small amp delivers great sounds.

Test & Text: Volker Frech

Photos: [www.lite-magazin.de](http://www.lite-magazin.de) , manufacturer's pictures

**RATING**