

The **ULTIMATE ELECTRONICS** Issue! 10 Amps Reviewed!

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# POWER & GRACE

*MBL's Corona C51 Integrated Amp*



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# Power & Grace

MBL CORONA C51 INTEGRATED AMPLIFIER

By Neil Gader, photography by Cody Hamilton



## MBL's

Corona Series electronics made a cameo appearance in my review in Issue 228 of the MBL 120 Radialstrahler, the breathtaking three-way compact. Regretfully, because I was running short on space, I could only touch on the general strengths of the C11 preamp, C21 stereo amplifier, and C31 CD player (The C31 was a 2013 Golden Ear recipient, Issue 235). Nonetheless I was mightily impressed with how well Corona performed under the ultra-high-resolution scrutiny of the Radialstrahler—a speaker that doesn't suffer fools lightly and has been known to un-ceremoniously show the door to any component it finds lacking. (And sadly I have to report my health insurance doesn't cover the withdrawal symptoms I've endured since the MBL 120s departed.) Long story short, when I was offered a second opportunity with a Corona amp—in this instance the newly released C51 integrated—I grabbed it.

A quick refresher: Corona is, technically speaking, MBL's entry-level series. "Entry level" is an expression I use guardedly since every product by this Berlin-based firm is built to a level that most components only aspire to in their electronic dreams. Corona was also much more than a replacement for the aging Classic line (circa 2006). MBL began with a clean sheet of paper in visual design, software implementation, and technical innovation. With the release of the €7,500 C51, Corona is now a complete five-component range that also includes the C31 CD transport/DAC, C11 preamp, C21 stereo amplifier, and C15 monoblock (500W into 4 ohms).

# MBL CORONA C51 INTEGRATED AMPLIFIER



To my eye, Corona screams elegance—almost Japanese in its graceful, uncluttered simplicity. The top-panel roofline inclines slightly toward its center, merging in a heavy plated panel that waterfalls into the C15's polished front-panel display, which is lit in a brilliant fluorescent blue. On top, the MBL's crest nests in a soft "corona" of light that doubles as a top-mounted dimmer for the front-panel display. There are no saw-tooth heatsinks, protrusions, or hard edges to mar the flowing, symmetrical lines of its chassis. So singular is the Corona profile that my own friends, comfortable in the presence of fancy electronics, would invariably cast their approving eyes on the Corona gear and ask, "Wow, what is *that*?" And tactilely the C51 immerses you in the experience of owning a fine audio instrument. It may not matter to everyone how a knob turns or a button releases, or how deep the luster of a chrome accent appears, but it does to me. The C51 may not be ultra-expensive, but it makes you feel rich with every look and touch.

Corona amplifiers, like the C51, are solid-state, and designed around LASA technology (for Linear Analog Switching Amplifier), an advanced implementation of switch-mode Class D topology and the brainchild of chief designer Jürgen Reis (see Sidebar). The C51 outputs a healthy 180Wpc into 8 ohms and 300Wpc into 4 ohms—specs that are identical to those of the C21 stereo amplifier I'd encountered previously. The C51's preamp stage uses a sophisticated analog volume control operable via a motorized potentiometer. Front-panel functions are reserved for small soft-touch buttons; the only resident knob is the volume control. All other functions are shuttled off to the remote control. Connectivity is excellent. The back panel is roomy and well laid out; its RCA and XLR jacks are widely spaced. An optional phono stage is available at extra cost (€1,089). Firmware updating is accessible via a standard SD slot on the back panel.

In my first go-round with the C11 preamp, I complained that the front-panel volume indicator was too small, virtually useless for fine volume adjustments from any real distance. I'd like to think that MBL took to heart my earlier criticism because that issue has been solved on the C51. Now when a volume change is requested, the software boldly increases the size of the numerical display for a few seconds. MBL, my eyeballs thank you.

Over the years I've heard all the elitist pro and con arguments about the integrated amplifier. That they are ho-hum, one-chassis compromises, with average parts-quality and puffed-up power specs, while separates, on the other hand, are technological showcases and super-sexy. Or, that integrated amps should be considered only in the interests of saving space and saving money—a recipe for sissies, not real audiophiles—while only dedicated separates take you down the true path to sonic nirvana. Fiddlesticks. Modern integrated amps are models of the efficient use of space. Plus, by combining preamp and amp sections, an entire bank of circuitry is eliminated along with the need for a pair of interconnects and the sonic influence that brings to bear. While it's true that

MBL's Reis is a die-hard analog guy (and an all-around nice guy, at that), but he's never ducked a challenge.

the tighter packaging can lead to thermal issues and EMI/RFI concerns, cutting-edge designs like the C51 have answered these Old School reservations.

MBL's Reis is a die-hard analog guy (and an all-around nice guy, at that), but he's never ducked a challenge. His stated goal for Corona was for it to match the qualities of the fine, traditional linear amplifiers MBL has been producing for years. In sonics, you can throw away every concern you might have harbored about Class D. Most particularly, the C51 takes the frequency extremes and makes them its playground.

From the start, it's remarkably quiet, with a deep velvet-black background, ideal for musical images to spring from (a quality that is unmistakably MBL). Its midrange is rich in color and texture, with vocals especially seeming to carry



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a few extra ounces of weight and air. It has some vestigial, almost brooding warmth and bloom in the bottom octaves, reminiscent of MBL's Reference line amps, though the C51 in comparison has a slightly lighter character. Though still armed with deep dynamic reserves and powerful bass slam, it's more cruiserweight than heavyweight. Bass response is classic "define and control." The C51 articulates with ease the cascade of tympani across the back of the stage during Copland's *Fanfare for the Common Man* [Reference Recordings]. It may not be as resonantly expansive in the bottom octave as, for example, the Vitus Audio RI-100, but it is still extremely satisfying in its vise-like grip on the fundamentals of string bass, tympani, and organ. It is also instructive to note that in the many months I've had the C51 on hand it never gave me the feeling that it was squelching dynamics, or otherwise close to reaching the limits of its power output, regardless of the speaker system it was driving.

Its top end is top-notch—airily extended with none of early Class D's constriction and cloaking of the treble. Reis' version is open, airy, and sweet where appropriate, and highly charged and aggressive when called upon. And frankly it has to be; Radialstrahler tweeters are cruelly revealing of mediocre electronics. When I played Arturo Delmoni's *Solo Violin Works* [JMR Records], the C51 sang with an open, unstricted voice. It captured the speed, sweetness, and even, at times, sinewy aggression of an instrument famous for filling the world's largest halls, unamplified.

A brief bias alert: My gauge for treble resolution and freedom from distortion is piano. It's a sound I understand well. I play the instrument a bit and refer to it constantly. When I play I'm reminded of the complexity of color and texture that one can hear with every strike of the hammers—a sound interwoven of wood, felt, and steel from the softest *pianissimos* to the grandest *fortissimos*. When I put on my reviewer's hat, some of my favorite recorded passages are Evgeny Kissin's reading of Glinka's *The Lark* [RCA], and for something completely different, the piano solo during jazz songstress' Holly Cole's rendition of "I Can See Clearly" [Alert]. I've played these tracks countless times, and they never fail to elicit differences from every component. Consider the passage in *The Lark* where a series of high-pitched trills is struck so firmly and rapidly that the overlapping harmonics create a bell-like ringing effect—at least, they do ideally. With uncanny agility, the C51 reproduces the individual notes of this cue without any smearing, even as the entire sequence becomes enveloped in a mist of ringing harmonics. Similarly, the transient bursts of aggressive bowing and resultant treble harmonics from Anne-Sophie Mutter's violin during Tchaikovsky's Violin Concerto [DG] revealed a top end that was not only smooth, extended, and grain-free, but dancing with a level of transient life that tickled the senses.

Although the C51 will happily oblige, reality in audio reproduction is not about being driven back in a listening chair by the report of a bass drum or achieving Black Sabbath levels in a den. My listening bias veers consistently in the direction of lower-level transparency, resolving power, and soundstage replication. And this is where the C51 proves its mettle. It has the touch of the classicist in the import it places on the finest inner details. An example is pianist Valentina Lisitsa performing a selection of *Beethoven, Schumann, and Liszt* [Naxos]. There's a passage where Ms. Lisitsa plays a repetitive, upper-octave melodic line that has always had a brief indiscernible artifact hanging over a note that just precedes a pause. It is an anomaly that, had the recording been on a vinyl LP, would have sounded like mistracking. In any event, I'd end up cocking my head to one side in frustration and asking myself, "What *is* that?" The C51 had the answer—Ms. Lisitsa was taking a *breath* on the beat—a quick inhalation, probably unconscious, that alighted on that one note. Revelations like this occurred consistently throughout my listening sessions

with all sorts of familiar material. Even bad edits in the recording studio revealed themselves more prominently.

When a company produces what is arguably the premiere omnidirectional loudspeaker in the world, as MBL does with its Radialstrahler range, it doesn't take a big leap to assume it knows a little something about measuring acoustic space. I think the main issue that listening to the C51 provoked in me was the way it integrated individual criteria—frequency, imaging, dynamics, transients—weaving them together into a seamless tapestry of reproduced sound. Every image found a home within the full context of the recording. At a concert, we experience this context first, the entirety of the performance with our eyes as well as our ears. But back at home we tend to focus on the more granular. We

Reality in audio reproduction is not about being driven back in a listening chair by the report of a bass drum.

## SPECS & PRICING

**Power:** 180Wpc into 8 ohms (300Wpc into 4 ohms)  
**Inputs:** Five RCA, one XLR  
**Outputs:** Two RCA  
**Dimensions:** 45cm x 44.5cm x 14.5cm  
**Weight:** 23kg  
**Price:** €7,500 in standard finishes; palinux or gold, €950; side panels in piano finish, €600; center section in piano finish €190; phono module, €1,089; balanced input, €387

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**ASSOCIATED EQUIPMENT**  
Sota Cosmos Series IV turntable; SME V tonearm; Sumiko Palo Santos, Air Tight PC-3; Parasound JC 3 phono; Synergistic Element Tungsten/CTS, Wireworld Platinum Series 7, Analysis-Plus Big Silver Oval interconnect & speaker cables; AudioQuest Coffee USB & Firewire, Synergistic Tesla & Audience Au24 SE phono & powerChord, Wireworld Platinum power cords. Mapleshade record racks



# MBL CORONA C51 INTEGRATED AMPLIFIER

## MBL's Unique Twist on the Switching Amplifier: LASA

begin breaking down the recording into component pieces. Some of this is provoked by the recording process itself, but another part of it goes to an amp's resolution and transparency—its retrieval power, if you will.

The C51 has the ability to take all the carved up segments from a recording and reattach them in a way that makes the result indistinguishable from the original. Many times I've listened to the intro to Audra McDonald's "Lay Down Your Head" [Nonesuch] for the delicate opening harp figure and the chamber group that joins in shortly thereafter, but only a handful of amps, including the C51, allow me to hear the entirety of the immersive space and image relationships that this recording offers. Even on a typical pop recording like Leonard Cohen's "Going Home" [Sony Music], I could hear the angelic backing chorus as it wafted through the black acoustic space beside Cohen's dark baritone and mingled with a calliope-like whistle, a vamping piano pad, and a tick of percussive accent in a way that shamed the multitrack artifice of many of today's other recording studios.

At the end of the day, it really doesn't matter what kind of prism you use to judge the C51. It has more power reserves than the majority of audiophiles will ever need. It's impeccably proportioned and lavishly appointed. Its musicality, needless to say, is first-rate. Separates may continue to hold sway at the more esoteric levels of the high end, but I'd gladly put the mbl C51 head-to-head with any of them. And let's see who owes whom an apology. Corona may be entry-level for MBL, but it's one world-class, sexy beast in my book. **tas**

Flexibility figures big in the Corona family of components. All are equipped with the MBL Smart Link protocol to centralize various functions. When co-joined via Ethernet cabling (owner-supplied), Smart Link enables simultaneous display dimming for all linked components plus control of inputs. For example, the input buttons on the remote control could simultaneously change inputs on the C51 as well as select inputs for CD/SPDIF/Optical/USB aboard the C31 CD transport/DAC. Additionally, menu-driven front-panel controls allow personalization of input names according to user preference, and unused inputs can be deactivated. A single push of a button will also sequentially power on or off the Corona family—when powering down, the display playfully wishes the user "good-bye," even though I kind of hoped for an "*auf Wiedersehen*." Standby power consumption is in the environmentally friendly range below 1VA.

Corona represents MBL's and Jürgen Reis' reinvention of the Class D or switching output stage. Anchored by a robust linear (non-switch-mode) power supply, a toroidal transformer features electrostatic shielding to prevent stray coupling to the ground potential of the circuit. It virtually eliminates stray currents between Corona Line devices providing a quiet environment for the use of unbalanced RCA wiring. The transformer also features a magnetic mu-metal outer shell to protect the circuit from magnetic interference.

The secret sauce, however, is the LASA technology. According to Reis, LASA technology overcomes a series of key hurdles that impede typical switching amps. He points out that traditional Class D tends to be load-dependant, so that it will literally sound different depending upon the impedance shifts it encounters with a specific loudspeaker. (All loudspeakers have impedance variations with frequency, some dramatic.)

The LASA switching technology mimics the low output impedance of a linear output stage, with the same high damping factor (low output resistance) at high frequencies that typical Class D designs normally only enjoy at low ones, plus the same low harmonic distortion values across the entire frequency bandwidth. To paraphrase, "The result is that frequency response will not change with load and THD will not vary with frequency." The takeaway is that the "speaker load will not affect the LASA amp and the LASA amp won't attenuate the loudspeaker's frequency response." In fact, Reis points out that the only similarity MBL claims with contemporary Class D is low heat radiation.

And Reis continues to explore the boundaries of LASA technology. At this year's CES, MBL introduced the rejiggered Noble Line, which uses an even more advanced LASA 2.0 technology. In my CES report in Issue 242 I wrote that according to Reis, LASA 2.0 is now capable of driving complex impedances and phase-angle swings, and delivering more current than ever before. And power output is up, as well. This represents a stunning shift away from traditional Class AB designs and underscores MBL's increasing confidence and commitment to its unique LASA/Class D topology.

## MBL: The Pinnacle of Audio Engineering



unique high end audio

MBL Akustikgeräte's products (such as the X-treme Reference System) are designed by a team of talented engineers. Chief Developer Jürgen Reis has been responsible for shaping the acoustic imprint of all MBL products for nearly thirty years. Time and again MBL has developed jewels of sound whose naturalness and synergy far exceed those of any established standards. For all employees at MBL, technically sophisticated circuitry is just the first step in a long journey of listening and research in the quest for the perfect audio component. Guided by long experience as a musician and sound engineer, Jürgen knows that in the world of natural sound, with its multilayered patterns and interwoven structures, there are dimensions that lie beyond anything he learned in electrical engineering textbooks. Development of MBL products can only be concluded when the act of listening to music transcends the technical and blossoms into a highly emotional experience.

MBL products are manufactured in our own factory outside Berlin. To build a tweeter capable of reproducing every nuance of natural sound - and this component serves as an example of every product we produce - MBL had to strike out in new directions and pursue them through to their ultimate consequence. When we found no tweeter on the market capable of performance we knew was possible, Jürgen invented our own carbon-based Radial Tweeter - a true masterpiece of engineering and craftsmanship. It takes no less than twenty-one hours before even a single MBL radial chassis has completed all its stages in the production process. Vertical integration at MBL is one hundred percent because only in our own factory can we build such high precision components to our exacting standards. Obviously we could save a great deal of money and effort if we took a standard dome tweeter that comes off a sub-supplier's mass production line at the rate of nearly one a minute. But if we did, we'd be depriving you of the enjoyment of too much sonic bliss.

MBL products are distributed in North America through a new subsidiary company, MBL North America, Inc., which is designed to bring you service commensurate with MBL performance. Please visit our website or contact us for further information on the MBL experience, whether for a single component, Radialstrahler speaker, or a complete MBL system.

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