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JULY 1, 2020



The ATC Compact Audio System offers exceptionally high quality and performance.

The CD2 disc player, SIA2-100 integrated amplifier, and SCM11 bookshelf speakers synergistically blend to offer a whole that exceeds the sum of its parts. The ATC Compact System is not inexpensive, but with a six-year warranty and premium construction, it is a system that you can probably pass on to your children with every component still meeting its factory specs. Ideal for a smaller room, the ATC Compact Audio System can also fill somewhat larger spaces with ease. Much better than expected!

The ATC Compact System includes the CD2 disc player, the SIA2-100 integrated amplifier, and the SCM11 bookshelf speakers. Premium construction and exceptional sound justify the system for use in smaller to moderately-large rooms or for the consumer wanting higher than average quality. This is not a typical "lifestyle" system.

Highlights

ATC Compact Audio System

- CD2: Very sweet and detailed sounding CD playback
- SIA2-100: Integrated amp is more powerful than its 100-watt rating indicates
- SIA2-100: Exceptionally cool operation
- SCM11: Exceptional speakers hold their own against far more expensive offerings
- SCM11: Need speaker stands
- Compact System: Not inexpensive for its performance
- Compact System: Far higher than average build quality for all components

Introduction

The ATC Compact Audio System was initially described to me as a “lifestyle” system. So, I thought I knew what to expect – A “cigar-box-sized combi CD player and Class D amplifier with some plastic speakers.” I planned to plug it into the headphone jack on my laptop, write a lukewarm description and voilà – review done!

But when two very large and heavy boxes arrived, I thought that there had been a mistake; a true “What the heck?!” moment! My expectations versus the weight of the boxes triggered some true cognitive dissonance...

I quickly discovered that the Acoustic Transducer Company (ATC) is the same company that I’ve read about for years as being one of the best (if not THE best, and by some great margin) British companies that make amazing-sounding and very high-end studio and professional sound equipment. Pardon my ignorance!

So immediately, I had to shift mental gears and evaluate the equipment quite differently from what I thought was going to be appropriate for “just a lifestyle system.”

About ATC

Formed in 1974 by Mr. Billy Woodman, ATC manufactured custom drive units for pro-sound customers. Its first product was the 12” PA75-314 driver.

In 1976, ATC created their SM 75-150 soft dome midrange driver. During the following decade, ATC drivers were used by Pink Floyd and Supertramp among many others. ATC also developed the EC23 Active Crossover, leading the industry toward the use of active monitor speakers.

In 1996, ATC began manufacturing audiophile electronics including the SCA2 pre-amplifier, SPA2-150 power amplifier, and SIA2-150 integrated amplifier. ATC also introduced its Super Linear (SL) driver that reduced third harmonic distortion by 10-15dB between 100Hz and 3kHz.

Today, ATC’s products are often used in multi-channel recording studios and major auditoriums.

Dramatis Personae

The ATC Compact Audio System consists of the following components:

CD2 Compact Disc Player



SIA2-100 Integrated Amplifier



SCM11 Bookshelf Speakers



ATC COMPACT AUDIO SYSTEM SPECIFICATIONS

CD2 Compact Disc Player

USB (DSD) INPUT:
 ○ Frequency response: 10-50kHz (+/- 0.1dB)

DISC TRANSPORT:

TEAC

DAC:

Premium AKM 32-bit

OUTPUT BUFFERS:

Class-A Discrete

MAXIMUM OUTPUT LEVEL:

RCA unbalanced: 9.2V RMS, XLR balanced: 18.4V RMS

OUTPUT IMPEDANCE:

10 ohms

S+N/N RATIO:

Wideband: >96dB

DIN: >108dB

IEC "A": >112dB

XLR OUTPUT CMRR (100-10KHZ):

>60dB

DISTORTION:

@1kHz: <0.0015% (-96dB), @10kHz: <0.003% (-90dB)

FREQUENCY RESPONSE (20-20KHZ):

+/- 0.2dB

S/PDIF OUTPUTS:

Toslink & Coaxial (2V peak/peak @ source impedance 75 ohms)

VOLTAGE:

115/230VAC 50/60Hz (internally selectable), 100VAC via a dedicated transformer

Mains voltage selection to be carried out by ATC only

MAXIMUM POWER CONSUMPTION:

10 Watts

DIMENSIONS (H X W X D):

77 x 315 x 315 mm, 3.1 x 12.4 x 12.4 inches

Dimensions exclude rear panel connectors. Take care to leave space behind the unit for connectors & cables.

WEIGHT:

4.2kg, 9.24lbs

SA2-100 Integrated Amplifier**MAX. POWER OUTPUT:**

100 watts per channel (continuous av. 8 ohms, 1kHz, both channels driven)

LINE INPUTS:

Two, stereo (one with additional front panel 3.5mm jack)

LINE INPUT SENSITIVITY:

500mV

INPUT IMPEDANCE:

13K ohms

LINE OUTPUT IMPEDANCE:

stereo @ 10 ohms

OVERLOAD CAPACITY:

13dB

FREQUENCY RESPONSE:

(<2Hz-250kHz): -3dB

TOTAL HARMONIC DISTORTION:

@ 1Khz.: <0.0015% (-96dB), @ 10Khz.: <0.003% (-86dB)

CROSSTALK:

(10Hz – 20kHz) >80dB

S+N/N RATIO:

Wideband: >96dB

DIN: >108dB

IEC "A": >112dB

COAXIAL & OPTICAL DIGITAL INPUTS:

- Distortion:

- @ 1kHz: 0.0015% (-96dB)

- @ 10kHz: <0.005% (-86dB)

- Frequency response: (20-20kHz) +/- 0.1dB

- S+N/N ratio: >100dB (IEC "A")

- Word lengths supported: 16-24 bit

- S+N/N ratio: >100dB (IEC "A")

- DSD Rates supported:

- 64 / 128 / 256 (Windows)

- 64 / 128 (Mac)

DAC:

Premium AKM 32-bit

VOLTAGE:

115/230VAC @ 50/60Hz (internally selectable)

100VAC via a dedicated transformer

Mains voltage selection to be carried out by ATC only

MAXIMUM POWER CONSUMPTION:

400 Watts

DIMENSIONS:

(H x W x D): 113 x 315 x 315 mm, 4.4 x 12.4 x 12.4 inches

Dimensions exclude rear panel connectors. Take care to leave space behind the unit for connectors & cables

WEIGHT:

9.7kg, 24.39lbs

SCM11 Speakers**DRIVERS:**

HF: ATC Neodymium Soft Dome Tweeter – 25mm / 1"

Mid/LF: ATC CLD – 150mm / 6"

MATCHED PAIR RESPONSE:

±0.5dB

FREQUENCY RESPONSE:

(56Hz-22kHz) -6dB

DISPERSION:

± 80° Coherent Horizontal, ± 10° Coherent Vertical (vertical center of cabinet is acoustic center)

SENSITIVITY:

85dB @ 1 Watt @ 1 meter

MAX SPL:

108dB

RECOMMENDED POWER AMPLIFIER:

75 to 300 Watts

NOMINAL IMPEDANCE:

8 Ohms

CROSSOVER FREQUENCY:

2.2kHz @ 12dB / octave

CONNECTORS:

5-way Binding Posts, 4mm Plugs, bi-wire / bi-amp capable

CABINET DIMENSIONS (H X W X D):

381 x 232 x 236 mm (grill adds 28mm depth)

15 x 9.1 x 9.3 inches (grill adds 1.1 inches depth)

WEIGHT:

10.9kg (24lbs) each

FINISH COLORS:

Black, White, Cherry, Black Ash

Additional Information**WARRANTY:**

(USA) 6 years from the date of purchase, excluding misuse, accident, or negligence.

MANUFACTURER:

Acoustic Transducer Company (ATC) (aka Acoustic Engineers) subsidiary of Loudspeaker Technology, LTD

ATC COMPACT AUDIO SYSTEM PRICE:

\$2,349 (CD2 disc player)

\$3,749 (SIA2-100 integrated amplifier)

\$2,199 / pair (SCM11 speakers)

COMPLETE COMPACT SYSTEM PRICE:

\$8,297 USD

WEBSITE:atcloudspeakers.co.ukwww.lonemountainaudio.com**COMPANY:**

- Sample rates supported: 44.1 / 48 / 88.2 / 96 / 192* (192kHz supported on coaxial only)
- USB (PCM) INPUT:
- Distortion:
 - @1kHz: 0.0015% (-96dB)
 - @10kHz: <0.005% (-86dB)
 - Frequency response: (20Hz-50kHz) = +/- 0.1dB
 - S+N/N Ratio: >100dB (IEC "A")
 - Word lengths supported: 16-24 bit
 - Sample rates supported: 32 / 44.1 / 48 / 88.2 / 96 / 176.4 / 192 / 352.8 / 384kHz

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SECRETS TAGS:

Product reviews 2020, CD player review, integrated amplifier review, bookshelf speaker review, compact system review, ATC, Speaker System Review 2020

Linkbacks

- [ATC C1 Mk. II Active Subwoofer](#)

Setup

One of the first things I noticed was that the C2 Compact Disc player has XLR outputs but the SIA2-100 integrated amplifier has no such matching inputs. This limits connection options between the CD player and integrated amp to either unbalanced RCA analog, Optical TOSLINK, or the coaxial S/PDIF connection. Since I used the S/PDIF input of the integrated amplifier to connect my streamer, I decided that the unbalanced analog connection between the C2 player and the SIA2-100 amp was the best alternative. This connection uses the internal DAC of the CD player, rather than relying on the DAC in the integrated amplifier, but since both components use an identical DAC chip, their performance should be identical.

Both the C2 and the SIA2-100 are finished in a dark silver that is just beautiful. I'm so tired of boring black components! But the looks wouldn't matter if the sound didn't match. See the Listening section for comments.



The case of the SIA2-100 integrated amplifier has some of the most attractive vents I've ever seen. And they work! Even after a long session of demanding content, the amplifier remained only lukewarm to the touch, indicating generous heatsinking and well-designed ventilation. If only other amplifier manufacturers were so thoughtful...



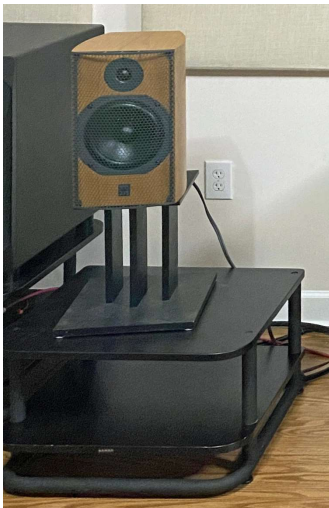
The terminals of the SIA2-100 and the C2 were of exceptionally high quality (inputs, outputs, and speaker terminals). There was no play or instability when connecting or disconnecting, and the quality control on friction fit terminals such as RCA jacks and speaker posts was absolutely perfect. You'd think that such things could be taken for granted, but I find that a LOT of expensive equipment misses this important detail. Not ATC – their quality control, even for connectors, is exceptional.

The ATC SCM11 speakers must also be mentioned in terms of their construction quality. The review set was finished in cherry veneer, and I've never seen such excellent veneering (except maybe on Sonus Faber products that are significantly more expensive). Although one could order these speakers in a variety of other finishes, I can't imagine why cherry wouldn't be the first choice. These look like a million bucks!



While discussing the SCM11s, I must also comment on the magnetic grills. I've seen a LOT of speaker grills, and they range from awful (the grill frame is an impediment to the drivers' dispersion) to mediocre (the grill fabric softens and muffles the treble). The grey metal grills of the SCM-11 speakers are examples of the very best grill designs I've ever seen or heard. They have a fully-open architecture that doesn't interfere with wave-launch, dispersion, or treble, and the grills are attractively curved to offer maximum protection from pets and kids. Bravo, ATC! I hope other manufacturers copy your grill design; it's brilliant.

The SCM11 speakers, being two-way bookshelf models and having a 20 degree (+/-10 degree) vertical dispersion window, should be set up with the physical center of the speaker's height (the acoustic center) at ear level. Since everyone's torso is a different height, and everyone's seating is at slightly different heights, and speaker stands generally aren't adjustable; this means you'll need to measure the distance from your ears to the floor when seated at your listening position. Then buy speaker stands of the proper height (minus half the height of each speaker). You want your ears to be exactly at the height of the vertical center of the speakers.



None of the stands I had on-hand were the right height for me – some were too short, and some too tall. I solved that problem by using an equipment stand to set my speaker stands on. This just happened to provide the right height for the review. But if you buy these speakers, definitely get a high-quality stand of exactly the right height. The speakers are good enough to justify the purchase.

Although the SCM11 speakers can be bi-wired or bi-amplified, I didn't experiment with these options since I had shorter, high-quality wires already available. I used Audioquest speaker cables for this review.



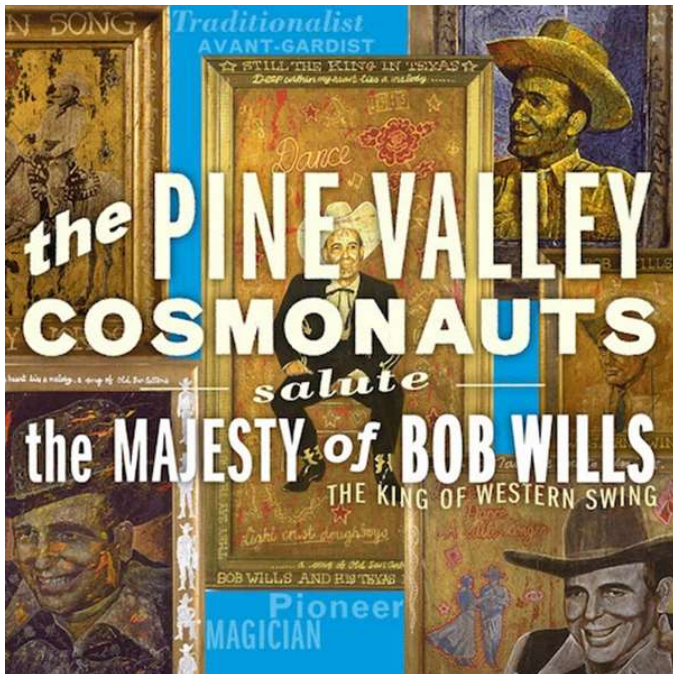
I tested this ATC equipment as a system rather than isolating individual components for comparison with other brands. I note that despite the back panel labeling, the SIA2-100 integrated amplifier does offer a volume-controlled line-level output. Therefore, your subwoofer(s) should be very easy to integrate into this compact system. All my listening notes, however, were made without any active subwoofer in the mix.

Associated equipment used for this review:

- o External hard drive with music library
- o Connected via Emotiva USB cable to
- o AURALiC Aries Streamer running LDS software on an iPad for control
- o Coaxial S/PDIF output of Aries connected to the input of the SIA2-100 integrated amplifier by IXOS digital interconnect
- o Afford-HiFi unbalanced RCA analog interconnects from the CD2 disc player to the SIA2-100 integrated amplifier
- o Audioquest speaker wires from the SIA2-100 to the SCM11 speakers

In Use

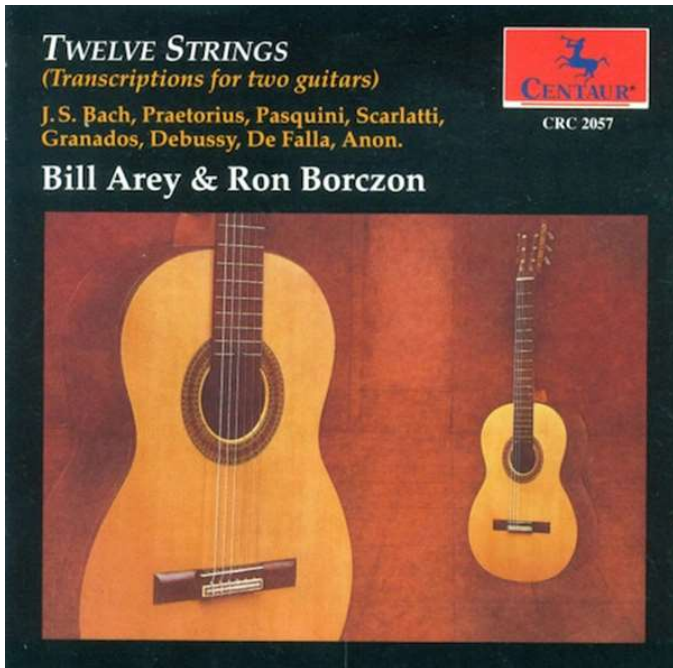
The ATC Compact Audio System was played with a variety of familiar music over a period of weeks including:



Pine Valley Cosmonauts "The Pine Valley Cosmonauts Salute The Majesty of Bob Wills"

Although there are a number of well-recorded tracks on this CD, my favorite continues to be Mr. Robbie Fulks with "Across The Alley From The Alamo." Its rollicking bass line allows the listener to hear how smoothly the system under test reproduces a range of bass guitar notes.

The ATC Compact Audio System excelled with this music without even breaking a sweat, and at volumes significantly higher than my normal listening levels. Kudos to the SCM11 speakers for their poise, detail, and excellent pitch definition. I did not find the bass guitar lacking on this system.



Bill Arey & Ron Borczon "Twelve Strings Transcriptions for two guitars"

Centaur label (CRC-2957)

This 1988 recording, on the unparalleled Centaur label, showcases two excellent guitarists playing a variety of classical selections. With the ATC Compact Audio System, the details of the recording were clear and clean.

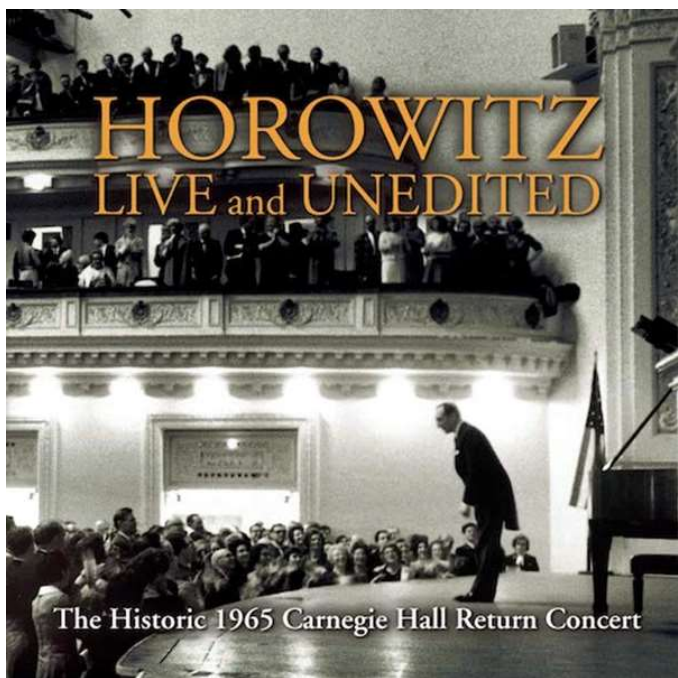
The finger noise of the wound strings, the body resonances of the two guitars, and the tonality change between the wound steel strings and the nylon treble strings were perfect. Many far more expensive systems that I've heard don't reproduce these details as well as the ATC Compact Audio System does. Now admittedly, the midrange-weighted sound of acoustic guitars doesn't challenge the deep bass or high treble of a stereo the way that more complex music might, but if a system can't get the midrange right, the rest of the frequency spectrum is academic. The ATC Compact Audio System gets the midrange right!

The Dave Brubeck Quartet "The Columbia Studio Albums Collection 1955-1966 CD box set"

There are many famous Brubeck favorites in this box set including "Blue Rondo a la Turk" and "Take Five," but I think my all-time favorite is the lesser known, but far more playful "Unsquare Dance." I had intended to merely sample a few tracks from this collection for this review, but the ATC Compact Audio System was so engaging that I ended up sitting and listening to several entire discs, just enjoying the music.



And that ability to engage the listener is a mysterious and impossible-to-quantify virtue that some systems possess while others miss entirely. To me, the ATC Compact Audio System has it, and the fact that it does slowed my review process considerably!



Horowitz Live and Unedited "The Historic 1965 Carnegie Hall Return Concert"

Vladimir Horowitz is certainly one of the greatest pianists of the 20th century. This recording, made in the twilight of his career, was originally released with a significant number of edits and retakes to correct mistakes made during his live performance. But this three-disc set, issued by Sony Classical, presents the live performance as it was heard by the Carnegie Hall audience.

A major test for any stereo system is its capacity to reproduce the piano, "the king of instruments," without smear, frequency emphasis, or loss of tone. The piano, having the capacity to reproduce all frequencies from low bass to very high overtones, is always a good test subject.

The ATC Compact Audio System acquitted itself exceptionally well with this piano recording. The soundboard was audible, the hammer work distinct when needed, and the sustain realistic when the pedals were engaged. The frequency response of the ATC Compact Audio System was sufficient to provide a realistic illusion of the piano being played live in my room, with a miniature simulacrum of Carnegie Hall and the audience around it.



Various Artists "Latin American Classics"

"Brilliant Classics" label

Now, THIS is one of the discs that I pull out when I want to test the dynamics of a system. Most small cabinet speakers don't have the dynamics to keep up with the exuberance of this music. My old Tekton Pendragons would rock with this music, but my KEF LS-50s, not so much...

The ATC Compact Audio System acquitted itself without embarrassment on this disc. The SCM11 speakers weren't anywhere near as dynamic as the Pendragons, but they definitely left the LS-50 speakers in the dust. Perhaps it is the pro-sound or studio influence of ATC, but these small passive speakers definitely can sound much larger and much punchier than one would expect by reading their specifications. I would imagine that in a small room, the SCM11 speakers would be jaw-dropping, but even in my much larger listening room, the speakers still surprised me with their dynamics and lower-than-expected bass response.

Conclusions



The ATC COMPACT AUDIO SYSTEM is not inexpensive, but it offers exceptionally high construction quality, great performance, Made in England cachet, and a beautiful appearance.

LIKES

- Exceptionally good SM11 speakers in gorgeous cherry veneer
- Best speaker grills I've ever encountered
- Overall neutral presentation with all types of music
- Beautiful dark silver color for the CD2 and SIA2-100 components
- High-quality parts everywhere in the system
- Surprising bass even in a larger room

WOULD LIKE TO SEE

- XLR analog inputs on the SIA2-100 to match the XLR analog outputs from the CD2 disc player
- Streaming capabilities for the CD2 disc player
- Tone controls on the SIA2-100 integrated amplifier

The ATC Compact Audio System is a very high-quality system that should satisfy for decades and decades to come. The price is high, but not when sound quality and durability are considered. Don't confuse it with the myriad of cheap "lifestyle" systems on the market – this isn't one of those, not even close. You get what you're paying for with this system, and if you can afford it, I recommend the ATC Compact Audio System without reservation for small to medium-sized rooms.