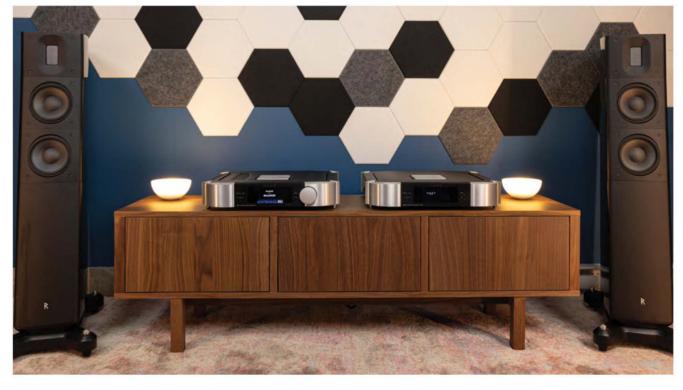
# the absolute sound

THE JOURNAL OF HIGH-END AUDIO

## **Equipment Report**

SEPTEMBER 202



## Moon North Collection 641 Integrated Amplifier and 681 Streaming DAC

A Pair of Aces

Alan Taffel

aving heard a variety of Moon gear at audio shows and having used one of its headphone amps as my reference for years, I knew it was good stuff. But I didn't know it was this good until I had the opportunity to sample the new North Collection in my own system. Color me immensely impressed.

The Moon North Collection is an entirely new series of components that embraces a trio of often mutually exclusive goals. The first concerns packaging. As Dominique Poupart, the company's Product Director, summed it up, "We came to understand that many consumers, including those who are hardcore audiophiles, nowadays prefer reducing the number of boxes they are using to form their hi-fi systems."

The North Collection's approach to that challenge is to make every piece (except power amps) multi-functional. As a result, those who opt into the new ecosystem will never require more than two components to meet their electronics needs. For a com-

pany whose mainstay products have historically been tried-and-true separates, this represents a major shift in thinking.

Here's how the collection plays out. At the entry point live the 641 integrated amp and the 681 streaming DAC. Obviously, these are no longer groundbreaking combinations; components of this genre have (deservedly) become common. Yet, worthy new arrivals, especially at an approachable price point, are always welcome. Moving up the line, the collection divides into two categories: a series of

all-singing, all-dancing front ends—like the 791 DAC/ linestage/streamer/phonostage—and power amps. You can mix and match at will.

Having determined the packaging, Moon set itself another, even more challenging priority. The company decreed that the North Collection's performance should outpace even its own separates. Huh? Everyone knows that cramming a bunch of functions into a single chassis almost always exacts a toll in performance.

The new Moon components confront this challenge

### Equipment Report Moon 641 Integrated Amp and 681 Streaming DAC



not with brute force, which would have resulted in unacceptably large units, but with ingenuity. Poupart claims that Moon "developed some clever ideas and a design approach that makes these combinations no compromises in any way. Indeed, we have achieved even better performance than before with all separates."

The most significant of these "clever ideas" is the new amplification circuit called MDCA, for Moon Distortion-Cancelling Amplification. MDCA is a gain-stage module that eschews global feedback circuitry. Instead, MDCA employs a small circuit completely outside the signal path that analyzes the signal and determines any minute corrections necessary to cancel distortions. It then injects these corrections into the signal at the output stage. In this way, MDCA behaves much like a servo-controlled subwoofer. How does it sound? I'll come to that shortly.

But first, there's the third goal to consider. The company wanted these new Moon components to look nothing like boxy separates. The thinking was that the space-efficient North Collection units would likely find themselves in multi-purpose rooms (e.g., living rooms, rec rooms) rather than dedicated listening spaces. In this scenario, looks become a higher priority.

I was mighty tempted to review the summit of the new range—one of the decked-out front ends and a compact but muscular power amp. But I was even more curious about how much of the North Collection's convenience-meets-performance concept could be delivered at the entry-level. Thus, I opted to review the aforementioned 641 integrated amp and 681 streaming DAC, which run \$11k and \$12k, respectively. I find this pricing quite attractive and, considering that competitive units easily crest \$30k apiece, highly competitive.

#### The 641 Integrated Amp

The 641 is a traditional integrated amp, in that it consists solely of a linestage and a stereo power amp. No DAC, no phonostage, no streamer. For those functions, you must climb higher on the North Collection ladder. However, the 641 distinguishes itself in other ways—specifically, aesthetics, technology, and sound.

Starting with looks, like the rest of the North Collection, the 641 boasts a stunningly handsome design. Its curvaceous chassis, black with silver accents, makes most other integrateds look downright plebian. Form follows function, too, and the front

The 641 distinguishes itself in other ways—specifically, aesthetics, technology, and sound.

panel includes a nice big display that is easily read.

Technology-wise, in addition to MDCA, the 641 includes a third-generation volume control to which Moon attributes much of the amp's sonic chops. In terms of power, the 641 puts out 125 watts/channel into 8 ohms. As you will see, this proved more than ample for even difficult speaker loads.

To evaluate the 641's sound, I used the excellent Metronome DSC streamer's analog outputs as a source. The idea was that this would give me a feel for the sound of a high-resolution source going through the integrated's line and power stages. (I turned off the DSC's internal volume control and set it to fixed output so I could explore all the 641's capabilities, including that new volume control.)

What I heard was disarming. The 641 did an immac-

ulate job of preserving the purity of Sufjan Stevens' "Pittsburgh." Resolution and openness were within spitting distance of my far-costlier reference CH Precision I1 integrated amp. Vocal, guitar, and piano timbres were spot on. Further, the track's emotional thrust was undeniable.

On one of my standard orchestral test tracks, the Pentatone recording of Stravinsky's L'Histoire du soldat, I heard, solid, tight bass, joined by excellent imaging and superb depth. Dynamics were first class, too, and it was surpassingly easy to hear every one of the many musical parts. The highs were not quite as refined as those of my reference integrated, but the difference was subtle at most. Similarly, on Donald Fagen's "I.G.Y.," the bass didn't have quite the transient attack of the CH but was in every other way exemplary.

These are high accolades, indeed, but none of them is, in my estimation, the 641's greatest asset: its fluidity. The 641 exudes a rare sense of liberation. Music flows freely, cleanly, and easily from this amp. And the layers of detail in complex tracks are laid out as on a picnic blanket. Not even the vaunted I1 has quite this same sense of ease.

## Equipment Report Moon 641 Integrated Amp and 681 Streaming DAC



#### Specs & Pricing

## Moon 641 Integrated Amplifier

Inputs: One balanced, four unbalanced Output power: 125Wpc

into 8 ohms
Input sensitivity: 300

mV -6V

Input impedance: 22k

ohms
Gain: 40dB

Frequency response:

2Hz-90kHz (+0dB/-3dB)

Crosstalk: -109dB

Signal-to-noise ratio:

109dB

## Total harmonic distortion + noise:

0.008% THD + Noise (@ 1W); 0.003% (@ 125W)

1W); 0.003% (@ 125W) Intermodulation

distortion: 0.06%

Damping factor: 700

Shipping weight: 57.5

lbs./26 kg

Dimensions: 18.95" x

4.03" x 18.32" **Price:** \$11,000

#### Moon 681 Network Player/DAC

Digital inputs: 8
Analog input
impedance: 50 ohms

Analog output level: 2V

rms/3.5V rms/6.5V rms **Crosstalk:** –125dB

Frequency response:

2Hz-100kHz (+0 dB/-3dB)

#### Signal-to-noise ratio:

125dB

Dynamic range: 125dB Total harmonic distortion + noise: 0.0003% (@ 0dBFS)

Intermodulation distortion: 0.0002%

Shipping Weight: 40

lbs./18 kg

Dimensions: 18.95" x

4.03" x 16.80" **Price:** \$12,000

#### SIMAUDIO LTD.

1345 Newton Rd. Boucherville, Quebec, J4B 5H2 Canada (450) 449-2212

#### **Associated Equipment**

#### Analog source:

Lyra Etna cartridge, Goldmund Studietto turntable, Graham 2.2 tonearm

#### **Digital sources:**

Metronome DSC DAC/ streamer; Bryston BCD-3 CD player

#### Electronics: CH

Precision I1 integrated amplifier (phonostage, DAC, streamer, linestage, power amplifier)

**Speaker:** Wilson

Sasha V

Cables and Cords:

Empirical Design

## Use the 641 and 681 together, with Roon, and you've got a pair of aces.

This held true even for challenging loads. In my initial listening sessions, I asked the 641 to power the somewhat inefficient and occasionally low-impedance Wilson Sasha V. The amp had absolutely no trouble doing so. For instance, every bass-forward track I played had plenty of wallop. Midway through my time with the Moon gear, I switched from the Wilsons to the YG Hailey 3s (review forthcoming). These are an even less efficient load, owing to their sealed cabinets. Nonetheless. the 641 never broke a sweat.

In conclusion, although I've gotten used to listening to a far more expensive integrated amp, I could happily live with the Moon 641. You do have to settle for a single balanced input (there are plenty of single-ended ones), but that may or may not be relevant to a prospective buyer. Meanwhile, what you sacrifice for the lower price in terms of sonics is barely worth mentioning. The 641 gets everything important just right. In short, it's an ace.

#### The 681 Streaming DAC

The 681 is a Roon-ready, MQA-compatible streamer/ DAC, a visual twin of the 641 (the two look smashing side-by-side or stacked). My plan for evaluating the 681 was to send its outputs to the CH integrated and compare Moon's performance to that of the latter's internal DAC/streamer. But that plan was not to be. It took just a few notes to determine that these two components simply didn't get along. The sound was overtly pale and

Instead, I ran the 681 into a 641 input set to bypass mode. Of course, this meant engaging the streamer's own volume circuit, intended for situations when the 681 is driving a power amp directly. I won't belabor the sound of this configuration, either. While I found that the 681 does a respectable job of serving as its own linestage, it didn't take long to ascertain that it sounds significantly better going through a proper linestage, like that within the 641. So, I ended up with the 641 and 681 playing as a team, and my comments on the 681's sound are part and parcel of the two units together.

One thing I will say that pertains exclusively to the 681 is that its sound is far more satisfying when the streamer is used in conjunction with Roon. On its own, us-

## **Equipment Report**

ing Moon's native streamer, MiND, the sound is sharp-edged, timbrally thin, and dynamically compressed. With Roon, there is none of that. Just listen to "Whispering Pines" by The Band. This beautiful track is significantly *more* beautiful when going through Roon.

Lest you feel that this is a major ding against the 681, let me assure you it is not. I have found this result, in various degrees, to be typical of virtually all DACs. Indeed, in my experience, Roon always sounds better than a manufacturer's own streaming endpoint. That's true even for the very best streamers, like the Metronome DSC, the dCS Rossini, and the CH Precision. There are good, solid technical reasons for this, and if you're so inclined you can read about how Roon works in my article "A Roon Primer" on the TAS website.)

Suffice it to say that you won't experience all that the 681 can offer, which is heaps, unless you use it in conjunction with Roon. (Note that Roon servers now start as low as \$499; not a big cost increment in the context of these components.) Of course, this proviso applies only when streaming. As described below, all other sources coursing through the 681's DAC sound as good as the streamer does when using Roon. In all, the 681 is another ace.

#### **Listening to the Combo**

The 641 and 681 were designed to sound good together and to operate as one. In service of the latter, the MiND app works in conjunction with the BRM-1 physical remote to allow full control of both units. I'm particularly partial to the BRM-1, since its volume control is an actual knob, which I find far preferable to arrows or buttons.

As for the combo's sound, my first listen was to a hi-res stream of the Brahms Symphony No. 2 (BSO, Nelson). Does the pair sound *quite* as good the functionally equivalent I1? No. But that's not surprising considering the more than 2x price difference. But, like the 641 alone, what the Moon combo delivers handily overwhelms the little that's missing.

Specifically, the North duo serves up an open, airy sound, with plenty of dy-

By any measure, these two North Collection components must be judged a complete success.

namic cues to carry the music's emotions straight to your heart. Meanwhile, a great sense of pace delivers the rhythms directly to your toes. On tracks like Peter Gabriel's "Playing for Time" from the exquisite *i/o*, the North pair provides a wealth of transient definition, deep and solid bass, heaps of dynamic contrast, and plenty of timbral information. I found the same attributes when using the 681 as a DAC for digital sources, such as the digital output of my Bryston BCD-3 transport/player. Further, that elusive and beguiling sense of flow that the 641 displays on its own is in full evidence with the 641/681 combo.

That fluidity is nowhere more evident than on piano music. In addition, dynamics are absolutely stellar. On my usual jazz-combo test track, Michael Wolff's "The Conversation," dynamics proved unusually compelling, with a crescendo so liquid and continuous it was thrilling. All this forms a backdrop for a relaxed, refined presentation that, nonetheless, contains an astounding amount of sonic and emotional detail.

So, what was missing? Not much. Only the additional timbral density that is the domain of costlier components. But the North combo didn't miss that benchmark by much.

#### Conclusion

By any measure, these two North Collection components must be judged a complete success. They achieve the efficient packaging and standout looks their maker envisioned, and the 641/681 pair even boasts modest pricing. Given all that, their sound is nearly miraculous. There's a fluidity and ease, combined with a surfeit of musical and sonic detail, that draw you willingly into the music's embrace. Use them together, use them with Roon, and you've got a pair of aces.