



PRESS RELEASE

Voyage i20 Integrated Amplifier ¥640,000/税別 ￡4,500 MSRP 2021年2月21日発売

クリークオーディオは、今までの方向性を大幅に変更し、新しい時代のオーディオを追求した、斬新な商品「Voyageシリーズ」を発売します。

Voyage i20インテグレイテッドアンプは、アナログプリアンプとDAコンバータにパワーアンプを組合せ、さらにユニバーサル電源を搭載した構成を、スリムなケースに収納しました。

<特徴>

アナログプリアンプ部： i20には、非常に柔軟性のある、10系統のアナログとデジタル入力を装備。

DAC部： i20には、USB、SPDIF、光、USBおよびブルートゥースの為に、6系統の入力を用意した、最先端のDAC回路を組込。

パワーアンプ部： 強力なサンケンSTD03トランジスタは、複数のMOS-FETによって増強され、G級動作にて、必要に応じて驚異的な出力電流を供給。

電源部： i20の性能の鍵は、オーディオ用に最適化されたスイッチング電源で、従来のアンプとは異なり、その巨大な1,500Wの電源は電圧を安定に保ち、負荷インピーダンスが8Ω→4Ω、4Ω→2Ωと半分になるたびに、2チャンネルでの出力を倍増することが可能。

<スペック>

■型番: Voyage i20 ■出力 @1% THD: 120W/8Ω/2ch, 240W/4Ω/2ch ■最大供給電流: ±26A/0.5Ω, 100ms ■歪み(THD): < 0.002%/20Hz-20kHz @2/3負荷8Ω ■S/N: >102dB ■周波数特性: 1Hz-100kHz ±2dB ■パワーアンプ利得: 33.4dB(x 47) ■DCオフセット: < +/-5mV ■クロストーク: -80dB/1kHz ■プリアンプ利得: 0dB (x1) default ■プリアンプ利得: 3dB, 6dB, 9dB, 12dB ■入力感度: 659mV(120W/8Ω) ■プリアンプ入力: 4 x RCA, 1 x XLR ■プリアンプ出力: 1 x RCA ■入力インピーダンス: 100Ω ■デジタル入力: 2 x SPDIF同軸(192kHz, 24bit), 2 x TOSLINK光(192kHz, 24bit), USB class 2 (PCM/384kHz, 32bit, DSD 64 & 128, Bluetooth/aptX HD) ■DAC特性: PCM 768kHz, 32bit, DSD 22.4MHz ■RC BUS: IN/IR sensor, OUT/Voyage CD ■スピーカー出力インピーダンス: < 0.02Ω/20Hz - 20kHz (ダンピングファクター >400) ■ヘッドフォン出力: 6.3mmステレオジャック ■ヘッドフォン出力インピーダンス: < 22Ω/12 - 600Ω対応 ■消費電力: 通常 20W, 最大 600W, スタンバイ 0.5W(自動スタンバイ: 30分後) ■重量: 9Kg ■寸法: W430×D350×H80mm ■オプション: MMフォノカード/SEQUEL-MK4 ¥35,000/税別

バーコード: Voyage i20 silver: 5060217950326, Voyage i20 black: 5060217950319 ※ 通常在庫はSilver、Blackは取り寄せ(+¥15,000)





Sound quality through design, innovation, and passion.

Creek Audio is a family run audio business, leveraging decades of experience and innovation, to bring advanced hi-fi product to market. No compromise has been made in delivering the best musical performance possible.

Voyage is a statement of our intent, to transport you on a journey to musical reality.

Outline

Creek products are designed **in the UK** and hand-made Europe by skilled craftsmen and women to the highest standards of quality and reliability.

The Voyage i20 integrated amplifier was styled by Luke Creek to be ergonomic and luxurious in operation. It is constructed using only the highest quality materials to provide a simple to use but high-end stereo experience.

The i20 combines an analogue pre-amplifier and digital to analogue converter with a power amplifier, powered by a unique stabilised power supply, housed in a slim and attractive case.

In producing the Voyage i20, Creek's engineers have combined several advanced techniques to achieve a hugely impressive powerhouse of an amplifier in a deceptively small case.

How it works:

Control interface

The i20's intuitive user interface is easily navigated via its large OLED display. Its sophisticated Menu system is navigated either by remote control or rotary control knobs.

Analogue Pre-Amplifier

The i20's is extremely flexible, boasting ten analogue and digital inputs. Analogue signal sources may be input via three pairs of RCA sockets or one pair of fully balanced XLR sockets. Gold-contact relays direct input signals to a state-of-the-art MUSES electronic volume and balance control circuit. The MUSES' resistor-ladder attenuator enables precise adjustment over an 80dB range, in 1dB steps, with extremely low distortion. The i20's pre-amplifier circuit is normally set for unity (0dB) gain but, if required, each input can individually amplify the input signal, in 3dB steps, up to +12dB max. Each input can also be set to bypass the pre-amp and volume control. This user selectable DIRECT mode allows the i20 to be used as a power amplifier with four inputs, or a combination to suit individual needs.

Phono input

Line input 1 can be enhanced with an optional plug-in **Sequel mk4 Phono pre-amp**, to provide for Moving Magnet or high-output Moving Coil vinyl record reproduction. The Sequel is selectable for 40 or 50dB gain, 100pF or 200pF capacitance and RIAA filtering, to reduce disc warp frequencies.



Headphones

To ensure compatibility with a wide variety of headphones, the i20 uses a dedicated headphone amplifier fed from the pre-amplifier's output. The high-current amplifier is capable of driving headphones loads specified from 8 to 300 Ohm, with no added noise or loss of fidelity.

DAC (digital to analogue converter)

The i20 incorporates a cutting-edge DAC circuit with multiple inputs for USB, SPDIF, optical, USB and Bluetooth.

The i20's USB Class 2 digital input provides bit-perfect audio streaming potential. Its multi-core XMOS streaming controller can handle a wide range of high-resolution PCM and DSD signal sources, up to 32-bit 768 kHz - PCM, and 22.4 MHz - DSD. To further enhance performance, the i20's USB circuitry is galvanically isolated from its DAC to eliminate ground loops or interference polluting the signal path. Software updates may be downloaded from the internet via USB, so the i20's operating system can always be kept up to date.

In addition to USB, the i20 supports 24/192 SPDIF signals via 2 co-axial and 2 TOSLINK inputs, for connection to television sound, CD Players, streamers, and other digital sources.

A "Comet mk2 aptX HD Bluetooth" module is built-in, for handy wireless streaming from mobile or static computer devices, capable of CD quality performance.

Pre-amplifier Output

All signals are electrically buffered and output via a pair of RCA sockets after passing through a volume control stage.

Power amplifier

The power amplifier's task is to increase signal amplitude and current to a level capable of driving a loudspeaker. Modern, multi-driver loudspeakers with complex cross-over circuits can often present a heavy demand on an amplifier. The i20 has been designed to drive even the most difficult speaker loads with delicacy and power yet be equally at home with simple 2-way monitors.

Powerful Sanken STD03 transistors are augmented by multiple MOSFETs to deliver prodigious power output current if required. The thermal tracking Sanken bi-polar power transistors immediately correct idle current, to accurately control and minimise cross-over distortion and reducing warm-up time to a minimum.

To optimise performance and maintain left right symmetry, Creek has developed a modular plug-in voltage amplifier circuit. Their discrete transistor circuitry and relatively low negative feedback allow input signals to be fed to the power amp without the need of additional gain in the pre-amplifier.

Emitter resistors are a necessary feature of bi-polar amplifier designs but, commonly used high-wattage wire-wound resistors are a source of unwanted inductance and potential non-linearity. To combat this problem Creek has developed an alternative high wattage, low inductance, resistor module, using multiple surface-mount resistors. To improve loudspeaker damping by maintaining



the amplifier's ultra-low output resistance, both left and right channel outputs are channelled through separate 10A relays. Internal wiring is kept to a minimum and isolated terminal posts allow connection by 4mm plugs, spade lugs and twisted wires, as required.

DC Coupling

In Creek tradition, conventional coupling and feedback decoupling capacitors have been eliminated to optimise sonic performance and directly couple input to output. An electronic servo circuit compensates for small DC offsets and maintains the amplifier's output at 0 volts DC.

Fault protection

To protect both the i20 and any loudspeaker connected to it, the i20 employs three forms of protection, constantly monitored by the i20's system microcontroller. **In the event of a fault, the output will be disconnected, and the input muted.**

Over-current

In the event of a pre-set current-limit being reached, either by driving an unacceptably low impedance speaker load, or a short-circuit in the output, both speaker relays will interrupt the signal to prevent potential damage.

DC offset

Direct current voltage will damage loudspeakers, as they are only meant to handle AC signals. Therefore, if DC is detected at the output, speaker relays will interrupt the signal instantly to prevent damage.

Over-temperature

Like most electronic circuitry, the i20 is designed to be reliable when working with a range of temperatures from 0 to 95 degrees centigrade. If the upper limit is reached the output will be disconnected until the temperature drops to a more acceptable level and the volume setting will automatically be reduced.

Class G amplifier mode

The i20 biases its output stage with a more efficient form of Class AB, called Class G. Class G allows the powerful i20 circuitry to fit inside a slim case yet run cool, even with a relatively small heatsink.

Creek has further enhanced the efficiency of Class G circuitry successfully used in the Evolution 100A amplifier.

A Class G amplifier operates with two voltage levels. The i20 tracks the input and output signals and a clever MOSFET circuit switches momentarily to higher voltage if required. To identify to the user when the amplifier is operating in Class G mode a letter G is displayed on the OLED display.

See Creek's White Paper on Class G for further details.

Power supply

The key to the i20's impressive performance is in its high-frequency power supply, optimised for audio electronics, enabling the latent quality of its amplifier to be realised. The Voyage i20's performance is unaffected by mains quality or voltage stability. Unlike most conventional amplifiers,



its massive 1500Watt power supply is voltage stabilised, enabling it to double its two-channel power output each time the load impedance is halved, regardless of mains voltage.

Standby power enables the amplifier to go to sleep after no signal is detected on the output for 30 minutes. Touching either control knob or remote handset will wake the amplifier up again.

See Creek's power supply White Paper for further details.

Voyage i20 Integrated Amplifier Technical Specifications:

Power output @ 1% THD	120 Watts into 8 Ohms, both channels
Power output @ 1% THD	240 Watts into 4 Ohms, both channels
Power output @ 1% THD	480 Watts into 2 Ohms, one channel
Power output tolerance	Voltage stabilisation enables repeatable power output regardless of mains voltage or load. Current limited
Continuous max output current	>10A (sine wave), current limited
Peak output current	+/-26 Amps into 0.5 Ohm load for 100ms - current limited
THD and Noise	<0.002% - 20 Hz to 20 kHz @ 2/3 rated power 8 Ohms
Signal to Noise Ratio	102dBA Line input
Frequency Response	1Hz to 100 kHz, +/-2dB
Power amp gain	33.4dB (x 47) un-balanced
Pre-amplifier analogue gain	0dB (x1) default.
Optional pre-amp gain or bypass	3dB, 6dB, 9dB, 12dB, pre-selectable on inputs 1 to 4
Input sensitivity	659mV for full power into 8 Ohms with 0dB pre-amp gain
Crosstalk	>80dB at 1 kHz
DC offset	< +/-5mV
Pre-Amp Inputs	4 x RCA (un-balanced) and 1 x XLR (balanced)
Pre-amp output	1 x RCA (unbalanced) and electronically buffered
Pre-amp output impedance	100 Ohms
Plug-in Phono options	Input 1 changes to Phono with Sequel mk4 MM Phono fitted
Digital inputs	2 x SPDIF Co-Axial – (192kHz, 24-bit) 2 x TOSLINK optical – (192kHz, 24-bit)
USB class 2 audio	PCM up to 384kHz, 32-bit. DSD 64 and 128 Bluetooth – aptX HD



DAC max performance	PCM 768kHz, 32-bit, DSD 22.4MHz
IR BUS IN	External IR sensor extender
IR BUS OUT	Daisy chain to another Voyage device
Loudspeaker Outputs	4mm binding posts with rear and side entry, plus spade lug
Speaker output impedance	<0.02 Ohms 20Hz to 20 kHz (Damping factor >400)
Headphone Output socket	6.3mm stereo jack socket
Headphone output impedance	<22 Ohms, suitable for headphone 12 – 600 Ohms
Mains voltage range	230V nominal. Working range - 170V - 265V AC - 50Hz 115V nominal. Working range - 85V - 140V AC - 60Hz Factory set to either 230V or 115V. Not user adjustable
Mains fuse type and rating	T10AL 250V - 5 x 20mm glass cartridge fuse 10 Amp, Time-lag, or Anti-surge, rated at 250V
Ground connections	Turntable grounding post next to Line 1 / Phono
Ground Lift	A 2-way switch is located under the chassis on the right
Finish colours	Silver or Black front panel. Outer cover is black
Power Consumption	Idle, Max, Standby <20 Watts, 600 Watt, 0.5Watts
Auto Standby	The amp will switch off after 30 minutes with no signal
Auto Standby Menu	Status and options controlled in Menu
Power supply fuse	T10AL 250V = 10 Amp, Time-Lag, rated at 250V, 5 x20mm
Weight	9kgs (20 lbs) net 11.5kgs (25.35 lbs) gross, packed
Size W/H/D	43 x 8 x 35 cm (17 x 3 x 13.8") including feet, knobs, and terminals

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