PRO TOOLS | CARBON
Built to capture brilliance

For artists, bands, and producers, Pro Tools | Carbon™ is a new breed of audio interface—built to capture brilliance. It's a hybrid audio production system that features incredible sound quality and combines the power of your native CPU with onboard HDX DSP acceleration. So you can push your computer to the limit when you mix and record through AAX DSP plugins with near-zero latency monitoring. All at the touch of a button. All in Pro Tools®.

Epic Performance
DSP AND NATIVE. THE BEST IN BOTH WORLDS.

With the Hybrid Engine under its hood, Carbon maximizes Pro Tools performance, letting you say goodbye to distracting third-party apps. Because every AAX DSP plugin has a native counterpart, you can move seamlessly between worlds at the touch a button. Put a track in DSP Mode for recording, and Carbon accelerates real-time AAX DSP plugins, while your CPU plays back the rest of your mix. Bring the track back to native mode for mixing, and Pro Tools automatically takes care of the technical tasks for you.

AAX. ARCHITECTED TO GO BEYOND.

Unmatched dynamic range. 64-bit float double precision processing. When it comes to shaping and enhancing sounds, the AAX plugin architecture lets you take your music further. It's the only plugin architecture with true hybrid capability. And it's designed to deliver the same impeccable sound quality in both native and HDX DSP domains. That means you can disconnect Carbon and take your mix on the road or collaborate with others who don't have the interface.

HDX DSP ACCELERATION. MADE TO REMOVE BARRIERS.

With a custom-designed FPGA and eight HDX DSPs at its core, Carbon is a powerhouse. The FPGA routes audio blazingly fast—one sample at a time—with near-zero latency, while the HDX DSPs handle real-time plugin processing, performing at an amazing 22.4 billion operations per second. So, no matter how big your session gets, or how many plugins you use in it, you can always record with sub-1 ms latency monitoring. And it frees up your CPU cores for virtual instruments and more creative mixing.

Super Sonics
CONVERTERS. CLEAN AND TRUE.

The best sound quality begins with exceptional audio converters. We went the extra mile designing ours with four ADCs per channel, providing a remarkable 126 dB dynamic range. From input, to the HDX DSPs, and into Pro Tools, the entire gain structure works at uniform

KEY FEATURES

> Achieve maximum Pro Tools performance with a hybrid system that harnesses onboard HDX DSP and native CPU power

> Record flawlessly through AAX DSP plugins in real time, enabling you to create polished cue mixes and track with zero audible latency

> Toggle any track from native to DSP processing mode, freeing up your CPU cores to handle virtual instruments and more creative mixing

> Capture every performance detail with up to 32-bit/192 kHz audio conversion, double precision clocking, and our most transparent mic preamp design ever

> Create, record, edit, and mix professional-quality music with Pro Tools, thousands of instrument sounds, and studio-staple effects and sound processors

> Expand your sonic possibilities with a special pack of premium plugins from Arturia McDSP, Plugin Alliance, UVI, Native Instruments, and more

> Get all the I/O you need to record an entire band, with 25 x 34 simultaneous channels, including four headphone outs

> Optimize or change up the tone of your mics, guitars, and basses with Variable Z inputs

FOR MORE INFORMATION, VISIT
avid.com/carbon

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32-bit precision, providing more headroom without any signal degradation. The result? You can capture clean, natural sounding audio. Every time you record.

MIC PREAMPS. MUSICAL AND TRANSPARENT.

With a padless design, incredible 126 dB dynamic range, and support for 32-bit/192 kHz audio conversion, Carbon features the most pristine preamps we've ever made. Capture performances without coloration. Bypass any preamp to use your own outboard gear. And with Variable Z built in, you can adjust input impedance to optimize or alter the tone of any microphone or instrument—from dynamic and ribbon mics, to guitar and bass.

CLOCKING. TWICE AS ACCURATE.

Precision clocking is crucial for distortionless, artifact-free audio. That's why we designed a double resolution implementation of the patented JetPLL™ jitter elimination technology that runs twice as fast as typical JetPLL-based clocks for better sound and separation. And it's twice as accurate, with extraordinarily low jitter, ensuring high-fidelity capture and playback.

All the I/O you need
CONNECTIONS. FOR THE WHOLE BAND.

With 25 x 34 simultaneous I/O, Carbon is ready to record any session—from solo artists to full bands. Eight pristine preamps, four headphone outputs, and 16 channels of ADAT I/O open up creative possibilities for miking, cue mixing, and expansion. Plus, its super-fast, high-bandwidth Ethernet connection not only preserves the highest possible sound quality from input to output, it's designed to support future workflow enhancements too.

WHAT'S INCLUDED

› Pro Tools | Carbon audio interface
› Pro Tools software
  • 1-year subscription with a Pro Tools perpetual parachute*
  • 115 AAX plugins (over 70 AAX DSP plugins), including UVI Falcon, the Avid Complete Plugin Bundle, and HEAT
  • 5.4 GB sound library
  • Standard support

› Additional premium plugins included
  • Arturia Rev PLATE-140
  • Brainworx bx_console N
  • Brainworx bx_rockrack
  • Brainworx bx_masterdesk
  • Brainworx Purple Audio MC77
  • Embody Immerse Virtual Studio
  • McDSP 6050 Ultimate Channel Strip HD
  • Native Instruments Vintage Organs
  • UVI Model D

› Accessories
  • Power cable
  • Ethernet cable
  • Rackmount screws and desktop feet
  • Registration card

*Carbon comes with a 1-year subscription to Pro Tools software, which includes access to the Avid Complete Plugin Bundle, HEAT, UVI Falcon 2, a 5.4 GB sound library, and Standard support, renewable annually. If you choose not to renew your subscription, your Pro Tools license includes a "perpetual parachute" that allows you to continue using Pro Tools at the last version you downloaded (it won't ever expire) along with a core set of plugins. Please note that you will need to renew your subscription if you'd like to continue receiving access to the latest Pro Tools updates and all bundled items noted above.

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INPUTS	
Combo mic/line inputs	8 balanced XLR/TRS with Variable Z (impedance) on inputs 5–8
DB25 line inputs	8 balanced via 25-pin D-sub
Instrument (Variable Z) inputs	2 unbalanced ¼-inch TS
Digital inputs	ADAT: 16 channels @ 44.1–48 kHz ADAT: 8 channels @ 88.2–96 kHz ADAT: 4 channels @ 176.4–192 kHz

A/D CONVERSION	
Mic preamps	Dynamic Range: 126 dB (A-weighted) THD+N: -105 dB (0.00056%) Frequency Response: 20 Hz–20 kHz, ±0.1 dB EIN: -129 dB (A-weighted)
Line inputs	Dynamic Range: 125 dB (A-weighted) THD+N: -103 dB (0.0007%) Frequency Response: 20 Hz–20 kHz, ±0.1 dB
Line inputs (true bypass)	Dynamic Range: 126 dB (A-weighted) THD+N: -114 dB (0.0002%) Frequency Response: 20 Hz–20 kHz, ±0.1 dB
Instrument inputs	Dynamic Range: 125 dB (A-weighted) THD+N: -103 dB (0.0007%) Frequency Response: 20 Hz–20 kHz, ±0.1 dB

OUTPUTS	
DB25 line outputs	8 balanced via 25-pin D-sub
Monitor outputs	2 balanced ¼-inch TRS
Headphone outputs	4 stereo ¼-inch TRS
Digital outputs	ADAT: 16 channels @ 44.1–48 kHz ADAT: 8 channels @ 88.2–96 kHz ADAT: 4 channels @ 176.4–192 kHz

D/A CONVERSION	
Line outputs	Dynamic Range: 120 dB (A-weighted) THD+N: -110 dB (0.0003%) Frequency Response: 20 Hz–20 kHz, ±0.1 dB
Monitor outputs	Dynamic Range: 120 dB (A-weighted) THD+N: -110 dB (0.0003%) Frequency Response: 20 Hz–20 kHz, ±0.1 dB
Headphone outputs	Power: 100 mW into 300 ohm; 200 mW into 32 ohm Dynamic Range: 116 dB (A-weighted) THD+N (32 ohm): -87 dB (0.0045%) THD+N (300 ohm): -100 dB (0.001%) Frequency Response: 20 Hz–20 kHz, ±0.1 dB

DSP ACCELERATION	
HDX DSP	8 HDX DSP processors (2.8 GHz aggregated processing)

ADDITIONAL SPECIFICATIONS	
Supported sample rates	44.1 kHz–192 kHz; 32-bit, 192 kHz max
Host connection	Ethernet
Power supply	Single (internal)
Chassis	1U 19-inch rack-mountable unit

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