



Symphony I/O Mk II and Logic Pro X

Symphony I/O | Mk II



INDUSTRY FLAGSHIP. MK II.



Symphony I/O Mk II is a multi-channel audio interface featuring Apogee's newest flagship AD/DA conversion, modular I/O (up to 32 inputs and outputs), intuitive touchscreen display and optional world-class microphone preamps. Designed to deliver professional sound quality for audio recording, mixing and mastering, Symphony I/O Mk II is the ultimate music production centerpiece for any modern studio. The new Symphony I/O Mk II comes with direct connectivity to one of three different platforms - Thunderbolt™, Pro Tools® HD or Waves SoundGrid® network.

Input and Output Flexibility

There is a Symphony I/O Mk II solution for everyone; the home studio, project studio, commercial recording studio and scoring stage. Choose from four base I/O configurations, 2x6, 8x8, 16x16, or 8x8 with 8 mic preamps and easily expand as your studio grows. With two module slots and the capacity for up to 32 inputs and outputs of A/D & D/A conversion per unit, Symphony I/O Mk II offers the best per-channel value of any interface in its category.

Legendary Sound Quality

Apogee engineers have made it their passion to improve every new flagship product by using the latest in electrical components and designing optimized circuitry that often exceeds the expectations of the component manufacturer. This is the Apogee Advantage. Symphony I/O Mk II is the culmination of this 30 year commitment and raises the bar on all Apogee products before it with even better audio clarity and sonic transparency. In fact, when equipped with either the new 8x8 or 16x16 Mk II I/O modules, Symphony I/O Mk II outperforms all other multi-channel audio interfaces available for Pro Tools HD or Thunderbolt based systems, making it the flagship audio interface for the entire professional audio industry and the obvious choice for countless GRAMMY winning artists, producers, songwriters and engineers.



Symphony I/O | Mk II



HIGHLIGHTS

- Best AD/DA conversion of any Thunderbolt™ audio interface
- Up to 32 channels of modular analog I/O with optional 8 mic preamps
- Best per-channel value of any interface in its category
- Choice of Thunderbolt, Pro Tools® HD (Mac/PC) or Waves SoundGrid® connectivity
- Ultra-low latency performance
- Intuitive touchscreen display and front panel control
- Designed in California, Built in the U.S.A

CHOOSE YOUR PLATFORM

Select one of three Symphony I/O Mk II connectivity options.



Thunderbolt

For connecting to a Thunderbolt equipped Mac running Logic Pro X or any other Core Audio compatible DAW. Up to 32 simultaneous inputs and outputs per unit/system and latency as low as 1.35 ms in Logic Pro X (96kHz / 32 buffer).

Available February 2016

Pro Tools® | HD

Pro Tools HD

For connecting to an existing Pro Tools HD Accel, HD Native or HDX system via Digilink connector. Up to 1 Symphony I/O Mk II unit connected to each HD Digilink port for up to 96x96 simultaneous inputs and outputs (max. 32x32 per unit, 3 ports total).

Available Spring 2016



Waves SoundGrid Network

Connect to the Waves SoundGrid System for studio, live and post production audio networking with real-time DSP for Waves and SoundGrid compatible third-party plugins.

Available Fall 2016



Symphony I/O | Mk II



CONFIGURATIONS

Input and Output Flexibility

There is a Symphony I/O Mk II solution everyone; the home studio, project studio, commercial recording studio and scoring stage. Choose from four base configurations, 2x6, 8x8 Mk II, 16x16 Mk II, 8x8 with 8 mic preamps and easily expand as your studio grows.

With two module slots and the capacity for up to 32 inputs and outputs of A/D & D/A conversion per unit, Symphony I/O Mk II offers the best per-channel value of any interface in its category.

Symphony I/O Mk II 2x6



Symphony I/O Mk II 8x8 Mk II



Symphony I/O Mk II 16x16 Mk II



Symphony I/O Mk II 8x8+8MP



All configurations shown with Thunderbolt connectivity.
Pro Tools HD and Waves SoundGrid available soon.



HD Option Card

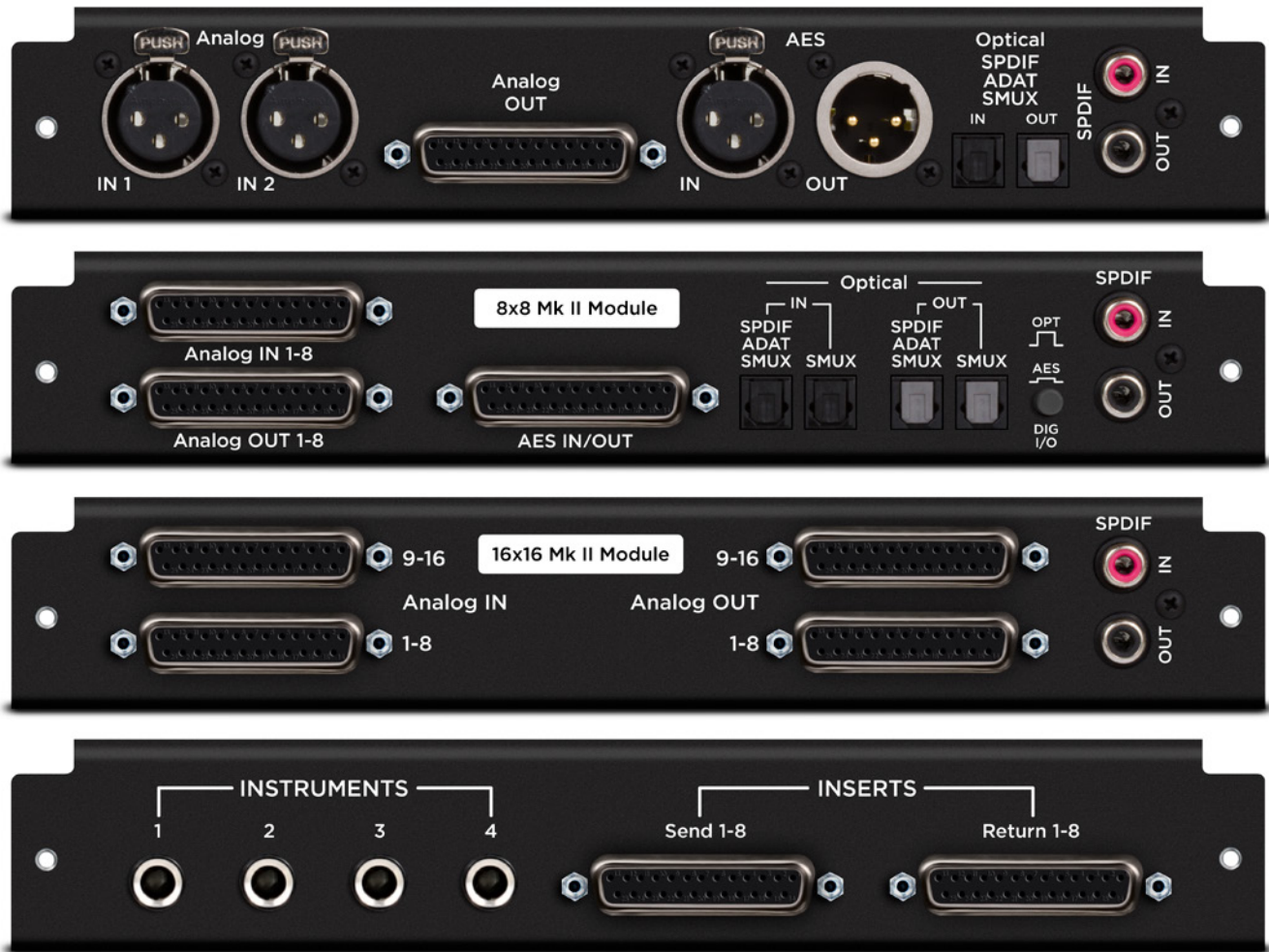


Symphony I/O | Mk II

DESIGN

THE MAGIC IS IN THE MODULES

The I/O Modules are the sound and soul of Symphony I/O Mk II, and represent 30 years of Apogee R&D and design excellence. These powerful Modules deliver Apogee's core competency: superior sounding digital audio recording. With 3 available I/O Modules and an 8 channel mic preamp module, you can choose from base configurations or expand to grow your studio's capabilities.



Learn more about I/O Modules and Configurations:

<http://www.apogeedigital.com/products/symphony-io/configurations>

Option Card Slot for Future Connectivity Options

Symphony I/O Mk II's new option card feature will future proof your investment and your studio. Working in Pro Tools HD now? Thinking about going Native with Thunderbolt or setting up an audio over ethernet network? The Option card slot offers flexibility for the present and the future, as new platforms develop and audio recording workflows evolve.



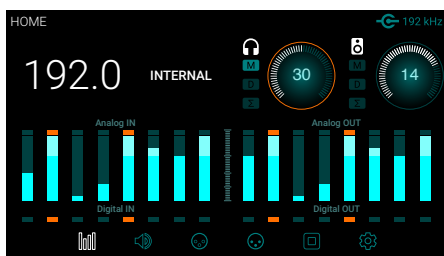
Symphony I/O | Mk II



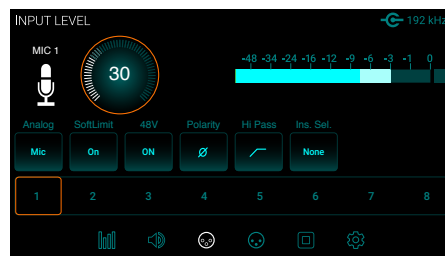
Front Panel Touchscreen with Comprehensive Control

All of Symphony I/O Mk II's essential input and output settings can be accessed from the front panel touchscreen. Change your input selection, monitoring levels, mic pre gain or calibrate your Symphony I/O Mk II to match the levels of the other analog gear in your system.

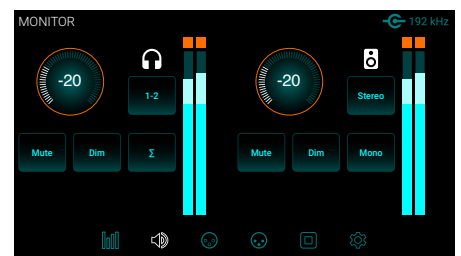
A high-resolution TFT display delivers all the visual feedback critical for recording and monitoring. Without looking at your computer, Symphony I/O Mk II lets you see metering for up to 64 channels of I/O, 32 IN x 32 OUT - signal levels, polarity, muting, phantom power and Soft Limit.



Home Screen



Mic pre Input Screen



Monitor Screen

Dynamic Temperature Control

Symphony I/O Mk II features advanced controls to keep the unit running at an ideal temperature, ensuring the highest level of performance and reliability. The new temperature controls are complemented by an improved fan and chassis ventilation design, which allows adequate component cooling to occur quietly.



Symphony I/O | Mk II

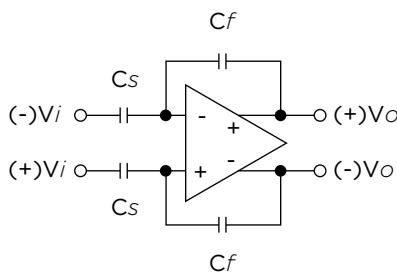


PERFORMANCE

Why do I need a good AD/DA converter?

Whether you record with a vintage Neve console, the best Neumann microphones or colorful mic preamps, a high quality AD converter is imperative to capture every nuance of your analog gear into your DAW. Without this, you will miss many of the subtleties and details that simply cannot be added back later with plugins. Similarly, the DA stage is essential to your perception of the recorded audio tracks. When mixing, regardless of what speakers you are using, if the converter is masking or having any effect on your audio, you could end up overcompensating with EQ, compression or other effects and failing to address other problematic details.

With Symphony I/O Mk II, you will hear more definition in each track and instrument of the mix, making it easier for you to make intelligent adjustments and achieve the ideal balance. Tracks will blend more harmoniously and mixing will simply be easier. The high end will be clear and not as brittle while the low end will be tighter than ever and more defined. This sort of unmatched audio quality can be noticed and appreciated by any listener.



Apogee Engineering Advantage

For over 30 years, Apogee has consistently redefined the state of the art in digital audio hardware design. We never rest on the laurels of our previous award-winning products - we're constantly evaluating the latest technological developments in analog and digital components, platform connectivity and user interface advances to design better performing, intuitive products that meet the needs of any audio professional.

As an example of the Apogee Advantage, Symphony I/O Mk II uniquely employs a fully differential op-amp as a fundamental building block throughout its analog circuits. The very latest iterations of this technology offer astounding performance - vanishingly low noise and distortion, lightning-fast slew rate and out-sized current output capability, all in a power efficient and

small package. These components offer performance that's orders of magnitude superior to what's found in most competitive audio interfaces, and are an important factor in Symphony I/O Mk II's ability to offer up to 32 channels of state-of-the-art conversion in one 2U package at an incredible price per channel value.



Symphony I/O | Mk II



Mk II Sound Quality New 8x8 and 16x16 Modules

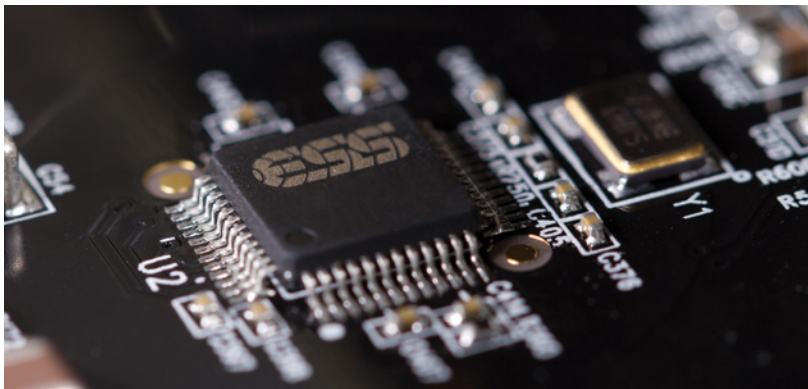
Like every flagship product we've introduced, Symphony I/O Mk II benefits from on-going expertise that constitutes the Apogee Engineering Advantage, once again pushing forward the state-of-the-art.

Symphony I/O Mk II includes the most refined analog-to-digital converter we've ever designed. The analog stage uses the same fully differential op-amps as found in the original Symphony I/O, but now in a circuit precisely streamlined to provide the most transparent path to the A/D stage possible. A Dual Sum A/D stage - where two conversion stages are summed for each analog channel - offers the lowest distortion and greatest dynamic range of any A/D converter we've ever designed - you get digital recordings that are true to your analog inspiration.

Symphony I/O MK II's D/A section has been optimized with a more powerful, robust analog output driver. This newly designed high current, low impedance circuit is capable of driving virtually any input with absolutely no decrease in performance, regardless of the load presented by the connected gear. This becomes especially important when connecting vintage gear with difficult load impedances and elevated operating levels, sometime over long cables - Symphony I/O MK II maintains fidelity and punch.

Audiophile-Grade Headphone Monitoring with Constant Current Drive

Symphony I/O Mk II features a single ultra high-fidelity DAC and headphone amplifier featuring Apogee's Constant Current Drive technology, first introduced in the Apogee Groove. This unique approach to headphone amplification dynamically compensates for the nonlinearities of any connected headphones, providing massive power while maintaining extremely low distortion and linear frequency response.



Includes ESS Sabre32 DAC Technology

ESS Sabre32 32-bit Hyperstream DAC with Time Domain Jitter Eliminator offers unequalled dynamic range, ultra low distortion, and unmatched audio clarity free from input jitter.

Learn more:

<http://www.apogeedigital.com/ess-sabre>



Symphony I/O | Mk II



Optional 8 Channel Mic Preamp Module

Symphony I/O Mk II's mic pre module includes 8 uniquely designed channels of Apogee's Advanced Stepped Gain Architecture™, in which the circuit is dynamically optimized to provide superior bandwidth, ultra low noise and nonexistent distortion across the unprecedented gain range of 0-85 dB. Whether recording powerful drums, dynamic vocals or delicate strings, your recordings retain the full impact, intricate detail and lifelike dimension of the original performance.

Symphony I/O Mk II's Mic pre module also includes 8 channels of digitally-controlled analog inserts, so that outboard processors like EQ and compression may be inserted into the signal path between the mic preamp and the A/D conversion stage effortlessly. Because the inserts are digitally-controlled from Apogee Maestro software, any insert can be assigned to any input channel - there's no need to physically reconnect your outboard equipment to a different insert channel.

AWARD WINNING SOUND QUALITY

A Difference You Will Hear

Apogee is an award-winning industry leader in digital recording technology with over 30 years of experience. Preferred by recording pros around the world, Apogee products like Duet, Quartet, Ensemble and Symphony I/O have been instrumental in creating countless GRAMMY® and OSCAR® winning recordings and have set the industry standard in professional recording for over two decades. Symphony I/O Mk II is built solidly on this reputation.



Apogee Maestro Software

Advanced Control for Advanced I/O



APOGEE MAESTRO

Application for Advanced Software Control

Access all control functions and settings with Maestro, Apogee's comprehensive software control application. Maestro features a single window interface with quick access to all device and system settings. Select your input types, change your I/O routing and use the mixer for low latency monitoring. Maestro lets you easily configure Symphony I/O Mk II Thunderbolt to fit your workflow.

Highlights

- Input type selection and level control
- Mic preamp level control
- Speaker, headphone selection and volume control
- Clock source, sample rate setting
- Minimized tool bar view with System Status, volume controls, mute and clear meters buttons
- Comprehensive metering
- Intuitive audio routing



SPECIFICATIONS

Features

- Best AD/DA conversion of any Thunderbolt™ audio interface
- Up to 32 channels of modular analog I/O with optional 8 mic preamps
- Best per-channel value of any interface in its category
- Choice of Thunderbolt, Pro Tools HD (Mac/PC) or Waves SoundGrid connectivity
- Ultra-low latency performance
- Intuitive touchscreen display and front panel control
- Designed in California, Built in the U.S.A.
- Thunderbolt: Mac OS only 10.9.5 and above
- HD: Any Mac or PC running Pro Tools HD 9 or greater

Analog to Digital

- THD+N: -114dB @ 22dBu (0.00024%)
- Dynamic range: 122dB A weighted
- Maximum input levels:
 - +4dB setting - 24dBu
 - 10dB setting - +6dBV
- Variable gain setting - 25dB of gain
- Frequency response at 44.1kHz
 - 1-20,000 Hz (+/- 0.05dB)
- Input impedance: 10K

Digital to Analog

- THD+N: -117dB @ 21dBu (0.00014%)
- Dynamic Range: 129dB A weighted
- Max output levels - ∞ to +24dBu
- Frequency response at 44.1 kHz:
 - dc to 20kHz (+/- 0.05dB)
- Output impedance: 25 Ohm
- Outputs are balanced through Apogee's proprietary Perfect Symmetry Circuitry (PSC)

I/O Module Compatibility

- Mk II 8x8, Mk II 16x16
- Backward compatible with all first generation Symphony I/O modules

Headphone Outputs

- 1 stereo 1/4" headphone output on front panel
- THD+N:
 - 110dB @19dBu into 600 Ohm (=80mW)
 - 101dB @14dBu into 32 Ohm (=470mW)
- Dynamic Range: 121db A weighted
- Output: Apogee's proprietary Constant Current Drive provides smooth frequency response with any headphones

Operating System

- Thunderbolt: Mac OS only 10.9.5 and above
- HD: Any Mac or PC running Pro Tools HD 9 or greater

Power

- 90-240VAC, 50-60Hz, 150W

In the box

- Symphony I/O Mk II Interface
- 3-pin IEC power cable
- Quick Start Guide
- Warranty Booklet

Symphony I/O Mk II Dimensions

- Inches: 17.75 (19 with Rack Ears) x 11.5 x 3.5
- Centimeters: 45 (48.26 with Rack Ears) x 29.2 x 8.9

Packaging Dimensions

- Symphony I/O Mk II Chassis Box
 - Inches: 22.875 x 17.75 x 9.25
 - Centimeters: 58.1 x 45.1 x 23.5
- I/O Module Box
 - Inches: 13.75 x 12.25 x 3.25
 - Centimeters: 34.9 x 31.1 x 8.3





APOGEE

www.apogeedigital.com

1715 Berkeley Street, Santa Monica, California 90404, USA