500ADAT

Expand your studio. Expand your sound.

500ADAT is home to 8 of your favourite 500 series modules. It's also an 8in/8out ADAT expander, analogue summing mixer, and artist mixer. It expands the I/O of any ADAT-equipped audio interface.

Cena:
Kategorie: [Audio](#), [Studio](#), [Interfejsy audio](#)

OPIS

- 8 Channel A/D-D/A converter
    - 8-in/8-out @ 44.1kHz - 48kHz
    - 8-in/8-out @ 88.2kHz - 96kHz
    - 4-in/4-out @ 176.4 - 192kHZ

- High-performance A/D-D/A conversion
    - Dynamic Range: 121dB A-weighted, AES17 method, 20Hz - 20kHz
    - Frequency Response: -1dB, 2.2Hz to >80kHz
    - THD+N: <0.00032% (-110dB) @ -4dBFS, 20Hz - 40kHz, 1kHz, A-weighted
    - Max I/O Level: +24dBu

- Master reference-quality internal clock
  - Capable of 44.1, 48, 88.2, 96, 176.4, and 192kHz operation
  - <0.5ps of jitter
  - Dedicated Word Clock Input and Output via BNC
  - External sync options using Word Clock BNC or ADAT

- Analogue summing mixer
  - 8-into-2 analogue summing mixer with +26.5dBu of headroom and balanced 1/4" jack outputs
  - C.A.S.T. link port for increasing summing mixer to 16-into-2 using Cranborne Audio 500ADAT

- Zero-latency artist mixer
  - Zero-latency analogue artist mixer with physical level/pan controls per channel and aux input blend controls
  - 2 high-power headphone outputs with independent blend and level controls

- Reference-Quality Headphone Outputs
  - THD+N: <0.0006% (-104.4dB) @ 20dBu, 1kHz, A-weighted, 300ohm load
  - Output Wattage (1kHz): 250mW x 2 @ 600 ohms, 650mW x 2 @ 220 ohms, 1.21W x 2 @ 100 ohms, 500mW x 2 @ 32 ohms
  - Frequency Response: 1dB, <1Hz to >70kHz

- High-current 8-slot 500 series rack
  - 250mA current per-slot with 2A total for all slots
  - XLR inputs, XLR line outputs, and TRS Inserts (pre-ADC) per 500 series slot
  - Module source switching options to send Analogue, USB or external C.A.S.T. signals through your favourite 500 series modules
  - Module bypass switches per-slot allowing 500ADAT to be used without 500 series modules inserted.

- C.A.S.T. Compatible
  - C.A.S.T. ports per channel for relocating analogue I/O around studio using passive or active C.A.S.T. breakout boxes via standard shielded Cat 5

- 24v, 5a external locking power supply
  - External power supply for improved analogue audio performance and heat dissipation.

- Designed and Engineered in the UK

28.04.25

○ Each and every 500ADAT is extensively tested by a team of dedicated engineers to ensure reliability and consistency

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All specifications are typical performance unless otherwise noted. All specifications are subject to change at any time. Tested with Audio Precision APx555 at 192 kHz internal sample rate and internal clock. HF response of digital measurements will vary depending on sample rate selected during recording.

Digital Performance

A/D Conversion

Test Signal Path	XLR Input - 500 Series A/D Converter - APx555 (ASIO)
Frequency Response	-1dB, 2.2Hz to >80kHz
	-0.05dB, 20Hz to 20kHz
THD+N	<0.00032% (-110dB) @ -4dBFS, 20Hz - 40kHz, 1kHz, A-weighted
	<0.00065% (-104dB) @ -1dBFS, 20Hz - 40kHz, 1kHz, A-weighted
THD	<0.00014% (-117.5dB) @ -8dBFS, 20Hz - 40kHz, 1kHz, A-weighted
	<0.00023% (-113dB) @ -4dBFS, 20Hz - 40kHz, 1kHz, A-weighted
	<0.0006% (-105dB) @ -1dBFS, 20Hz - 40kHz, 1kHz, A-weighted
Dynamic Range	121dB A-weighted, AES17 method, 20Hz - 20kHz
Max Input Level	+24dBu

D/A Conversion

Test Signal Path	500 Series D/A Converter - Insert Send - APx555 (ASIO)

Frequency Response	-1dB, <1Hz to >61kHz
	-0.05dB, 20Hz to 20kHz
THD+N	<0.0003% (-110.5dB) @ -4dBFS, 20Hz - 40kHz, 1kHz, A-weighted
	<0.0004% (-108dB) @ -1dBFS, 20Hz - 40kHz, 1kHz, A-weighted
THD	<0.00014% (-117.5dB) @ -8dBFS, 20Hz - 40kHz, 1kHz, A-weighted
	<0.00018% (-115dB) @ -4dBFS, 20Hz - 40kHz, 1kHz, A-weighted
	<0.00036% (-109dB) @ -1dBFS, 20Hz - 40kHz, 1kHz, A-weighted
Dynamic Range	121dB A-weighted, AES17 method, 20Hz - 20kHz
Max Output Level	+24dBu
Clocking	
Jitter	<0.5ps
Analogue Performance	
Line Outputs (Aux 1+2, Mix)	
Test Signal Path	Aux Input - Line Outputs - APx555 (Line In)
Connection Type	1/4" Jack, Impedance Balanced
Output Impedance	150ohm balanced, 75ohm unbalanced
Max Output Level	<+22dBu
Freq Response	-1dB, 1.4Hz to >80kHz
THD+N	<0.003% @ +18dBu, 1kHz
Dynamic Range	105dB A-weighted, AES17 method, 20Hz - 20kHz

Noise Floor	<-93dBu A-weighted, 20Hz - 20kHz, (Unity Gain)
Summing Mixer	
Test Signal Path	XLR Input - Summing Mixer Bus (Unity) - Mix Output - APx555 (Line In)
Freq Response	-1dB, 2.25Hz to >80kHz
	-3dB, 1.2Hz
	-0.5dB, 3Hz
THD+N	<0.0007% @ +23dBu (-1dBFS), 1kHz
THD	<0.0003% @ +14dBu (-10dBFS), 1kHz
	<0.0004% @ +20dBu (-4dBFS), 1kHz
	<0.00055% @ +23dBu (-1dBFS), 1kHz
Dynamic Range	108dB A-weighted, AES17 method, 20Hz - 20kHz
Noise Floor (A/D 9-10)	-108dBFS A-weighted, 20Hz - 20kHz
Max Contribution Level	+28dBu
Pan Law	-4dB
Noise Floor (Mix Output)	-90dBu, A-weighted, No channels routed
	-89.5dBu, A-weighted, 1 channel routed (Unity)
	-84dBu, A-weighted, 8 channels routed (Unity)
Headphone Amp	
Test Signal Path	Aux Input - Headphone Output - APx555 (Line In)
Frequency Response	-1dB, <1Hz to >70kHz
THD	<0.0006% (-104.4dB) @ 20dBu, 1kHz, A-weighted, 300ohm load
THD+N	<0.00085% (-101.4dB) @ 20dBu, 1kHz, A-weighted, 300ohm load

Output Impedance	0.33 Ohms
Output Wattage	250mW x 2 @ 600 ohms, 1kHz
	650mW x 2 @ 220 ohms, 1kHz
	1.21W x 2 @ 100 ohms, 1kHz
	500mW x 2 @ 32 ohms, 1kHz
Dynamic Range	114.5dB A-weighted, AES17 method, 20Hz - 20kHz, 300ohm load
Noise Floor	-93.5dBu A-weighted, 20Hz - 20kHz, 300ohm load

System Performance

Analogue Path Phase Performance

Test Signal Path	XLR Input - Empty 500 Series Slot - Summing Mixer Bus (unity) - Mix Output - APx555 (Line In)
Phase	<1.5° @ 20Hz, <11° @ 20kHz
Test Signal Path	XLR Input - Camden 500 Preamp (Mic Mode, 6dB Gain) - Summing Mixer Bus (unity) - Speaker A Output - APx555 (Line In)
Phase	<3° @ 20Hz, <13.5° @ 20kHz (Preamp mic mode, 6dB Gain)

Digital Round-trip Performance

Test Signal Path	500 Series D/A Converter - 500 Series A/D Converter - APx555 (ASIO)
Dynamic Range	118dB A-weighted, AES17 method, 20Hz - 20kHz
THD+N	<0.0004% (-108dB) @ -4dBFS, 20Hz - 40kHz, 1kHz, A-weighted

Power

AC Requirements	100V – 240V AC, 50 – 60 Hz

Total Power Consumption	24v, 5A DC, 120w
500 Series Slot Current	250mA per rail
Total Available 500 Series Slot Current	2A
Environmental	
Operating Temperature	+1 to 30 degrees Celsius
Storage Conditions	-20 to 50 degrees Celsius
Dims/Weights	
Unit	
Width	481mm(19"), Rackmount
Height	185mm(7"), 4u
Depth	219m(8.6")
Unit Weight	7kg
Shipping Carton	
Width	550mm(21.7")
Height	280mm(11")
Depth	335m(13.2")
Weight	7.5kg

Option:

N22 is a standalone 4 channel Cat 5 snake and advanced audio distribution system using C.A.S.T.

Standalone Cable Management Tool

Put simply, N22 replaces 4 balanced XLR cables with 1 shielded Cat 5e, Cat 6, and Cat 7 cable over distances of up to 100m.

Featuring our C.A.S.T. system, N22 distributes audio around studios or stages by repurposing the internal copper wires of shielded Cat 5e, Cat 6, and Cat 7 cable to transport balanced analogue audio to and from other C.A.S.T. enabled products - such as another N22.

Advanced C.A.S.T. Breakout Box

Studios already built around a Cranborne Audio interface can use N22's to transform their studio space.
Place N22 in the live room and audio connected to N22 will appear directly at the interface's inputs ready recording. At the same time, the same C.A.S.T. connection also sends a stereo monitor mix from the interface directly to N22's balanced outputs.

N22H

Reference-Grade Headphone Amplifier, Cat 5 Snake, and C.A.S.T. Breakout Box.

Deployable Headphone Amps via Cat 5

N22H is a headphone amp that can be deployed exactly where it is needed - right beside the musician.

Using our C.A.S.T. system, N22H can be connected on the end of a 100m (330ft) shielded Cat 5e, Cat 6, and Cat 7 cable and deliver a headphone mix directly to the musician during tracking.

Standalone Reference-Quality Amplification

Based on the same custom design found in the renowned 500R8 interface, N22H's headphone amplifier achieves a flat Frequency Response from 0.8Hz to above 250kHz and

ultra-low distortion (0.0009% THD+N, 100 kOhm load) allowing it to power headphones with clean, transparent power during critical listening, mixing, and mastering.

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