

The Apogee Rosetta AD — Specifications

Analog and A/D Converter

Parameter	Value	Units
Resolution	24	bits
Sample Rate	44.1–48, 88.2–96 kHz	±10%
Input Impedance		
Pro	9K	Ω
Consumer	15K	Ω
Relative THD+N		
–0.1 dBFS	–110	dB (unweighted)
–20 dBFS	–112	dB (A-weighted)
–60 dBFS	–91	dB (unweighted)
–60 dBFS	–93	dB (A-weighted)
–60 dBFS	–56	dB (unweighted)
–60 dBFS	–58	dB (A-weighted)
Dynamic range		
–60 dB, Unweighted	116	dB
–60 dB, A-weighted	119	dB
Peak Spurious Component	–126	dB (max)
Group Delay (in passband)	34/Fs	seconds
Passband Ripple	±0.001	dB
Digital Filter Stopband	0.5542Fs	kHz
Stop-band Attenuation	117	dB
Channel Separation		
Left/right	120	dB (worst case)
Frequency Response (10 Hz–20 kHz)		
Gain	±0.025	dB
Phase	< 0.01	degrees
Common-Mode Rejection Ratio		
60 Hz	>> 100	dB
1 kHz	>> 80	dB
Input Level, maximum (no gain)		
Professional, balanced	27	dBu

Parameter	Value	Units
Professional, unbalanced	23	dBu
Consumer, balanced	16	dBu
Consumer, unbalanced	15	dBu
Input Level, adjustment range	20	dBu
Crystal Oscillator accuracy	±50	ppm
Clock Jitter, 32kHz–106 kHz	<< 22	psec

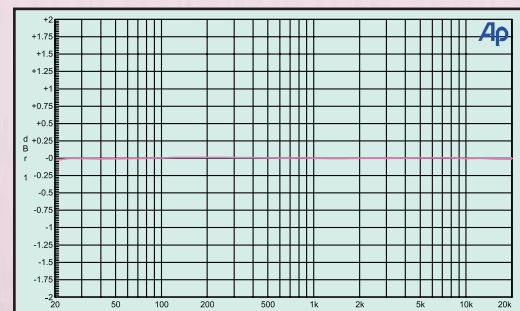
Digital Signal Processing

UV22HR Amplitude		
16 bits	–84	dB
20 bits	–108	dB
Over Detection	1–4 consecutive 0 dBFS readings	(user-definable)

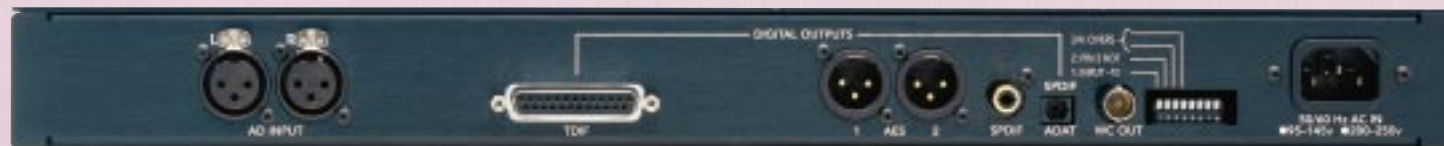
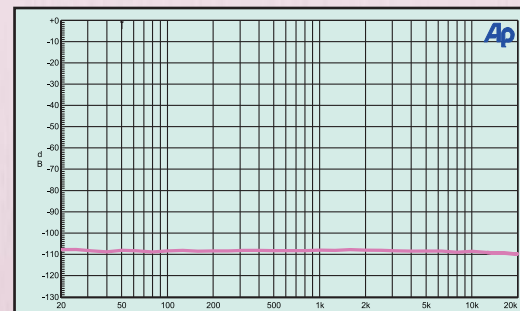
System

AC line voltage	100, 120, 220, 240 vac	(set internally)
Fusing	5 x 20 mm, 800mA (100–110v); 400 mA (220–240v)	slow-blow
Power	15	Watts
Size (w, h, d)	19 in, 1.75 in (1U), 14.25 in	
Weight	6 lb (2.7 kg)	

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The Rosetta AD's frequency response (shown left, $F_s=48$ kHz) and Total Harmonic Distortion plus Noise (right) show the exceptional performance of this unit. The Rosetta AD not only out-performs other converters in its price range: it out-performs converters costing many times more. This is the Apogee tradition.



The Apogee Rosetta AD features clean, uncluttered front and rear panels. At the rear of the unit, all interfaces are easily accessible. The analog inputs may be balanced or unbalanced, pro or consumer levels. At standard 44.1 and 48 kHz sample rates, both AES ports are available: at 88.2 and 96 kHz both ports are used to create 2-channel path.



The Heart of Digital Audio.

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The Rosetta AD.

24-Bit Analog to Digital Conversion at the Heart of your Digital Studio



Solution Series

The highest quality you can afford.



The Rosetta AD – Your Analog to Digital Solution.

NOW YOU CAN AFFORD to bring world-class audio quality to your digital recordings: install an Apogee SOLUTION SERIES converter in front of your DAT recorder, MDM or DAW, or on the output of your analog console.

For over a dozen years, Apogee Electronics has set the standards in digital audio. From the first high-definition filter designs to the latest high-end, high-resolution, high sample-rate converters, Apogee has led the field.

For our next products, we decided to set our engineering department some new and challenging goals. They were to design a new line of conversion products especially for the project studio owner. It should be made available at a lower price point, but without risking the quality—there was no way we would consider compromising the unique sound of an Apogee converter simply to meet a price.

The result is Apogee's new SOLUTION SERIES™. No-compromise conversion products, true Apogee quality, tailor-made for your project studio, at a price you can easily justify. Now everyone can own an Apogee—beginning with the astonishing ROSETTA™ AD 24-bit, 2-channel analog to digital converter.

The Rosetta AD is a 24-bit analog to digital converter with all the most common digital interfaces—AES/EBU, ADAT, TDIF and S/PDIF—included as standard.

The feature set of the Rosetta AD has been carefully tailored to project studio requirements. You won't pay for extensive features you'll never use: we carefully researched exactly what facilities you need and expect from an outboard A/D converter... and deliver them in an affordable, compact, 1U rack-mount package.

The Rosetta AD features analog

The Rosetta AD at a glance

- High quality Apogee 2-channel 24-bit A/D conversion at an affordable price.
- 44.1/48 or 44.1/48/88.2/96kHz versions
- Ideal for project studio recording and mastering to DAT, MO or modular digital multitracks
- 2xAES/EBU, S/PDIF, ADAT, TDIF interfaces
- UV-22HR Improved high-resolution word-length reduction to 16 and 20 bits
- Pro/consumer levels, balanced/unbalanced
- User-defined over indication
- Simple to operate, stylish front panel
- Easy-to-read bar-graph metering.

inputs operating at pro or consumer levels, balanced or unbalanced. The highest quality Apogee 24-bit conversion drives two AES/EBU outputs so you can feed two machines at once. In addition, ADAT, TDIF, and S/PDIF coax/optical interfaces are all built-in, for the absolute maximum in quality and flexibility!

Choose the standard version, with 44.1/48 kHz sample rates; or go for gold with the 96 kHz version, offering 44.1, 48, 88.2 and 96 kHz sample rates. You can even upgrade from one to the other.



The standard Rosetta AD offers 44.1 and 48 kHz sampling, while the high-density "Rosetta 96" adds 88.2 and 96 KHz rates. You can even upgrade to 96 later!

Apogee's renowned Soft Limit® technology allows you to record at the maximum level without overs, and our new high-resolution UV22HR® process allows you to generate flawless 16- and 20-bit masters retaining as much of the original 24-bit resolution as possible.

Apogee's exacting analog and digital design assures top audio performance without compromise, including excellent stereo imaging and the unique, transparent Apogee sound.

The panel of the Rosetta AD is designed for quick and easy operation. Every function has its own control, clearly labeled to avoid confusion. The metering features easy-to-read bar-graph LEDs with oversize "over" indicators—and you can determine how many consecutive digital full-scale samples constitute an over.

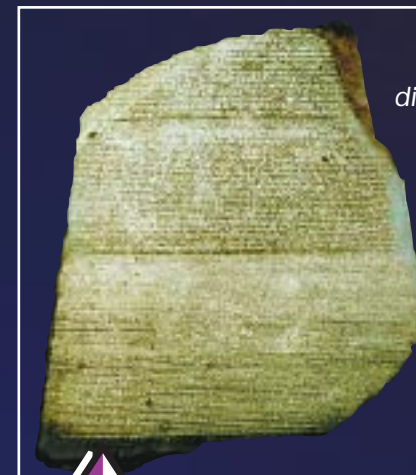
Try the Rosetta AD at your Apogee dealer today. You'll find it the perfect future-ready tool for translating analog signals to digital—without compromise—at a price you can afford.

The quality of Apogee converters is the foundation of our reputation. *We just made it easier to own one.*

UV22HR—New & Improved

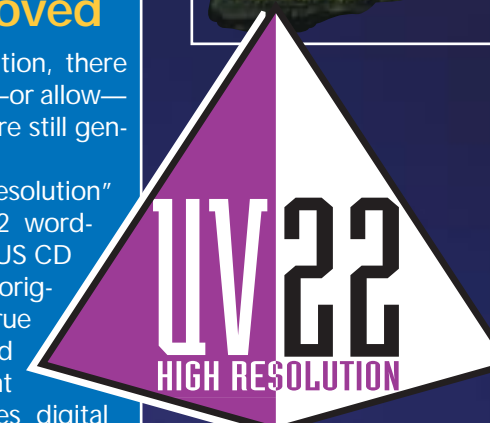
Although the Rosetta offers 24-bit resolution, there are still plenty of applications that don't need—or allow—that level of resolution. CD, DAT and MDMs are still generally 16-bit, or 20-bit at most.

Our solution: UV22HR, the latest "high resolution" development of our industry standard UV22 word-length reduction system, used on most top US CD releases. UV22HR preserves even more of the original resolution than before. You enjoy the true theoretical noise floor at your chosen word length, but, like analog, you can hear significant extra detail below the noise. UV22HR makes digital sound more like analog—without the drawbacks.



What's In A Name?

The Rosetta Stone, discovered by Napoleon's soldiers in Egypt in the 18th century, provided the key to translating the mysterious hieroglyphs of the Ancient Egyptians. In the same way, Apogee's Rosetta AD is the key to flawless translation of analog signals into multiple digital formats.



The Rosetta AD includes all the most common standard industry digital interfaces—ADAT, TDIF, AES/EBU and S/PDIF (optical and coax). It's the ideal front-end for all your digital gear, from CD and DAT recorders to modular digital multitracks; from computers to video editors (see below). Interfacing your present or future gear is a snap!

