



AGES OF GOLD

Whether you already have the money or need to tediously save it: a more high-end investment than for the new Accuphase Pre C-2450 and the A-47 power amplifier can hardly be done – a rich return in sound included.

Future Accuphase owners will have to endure some initial pain, but are rewarded for their troubles with aureate times. More accurately, years of joy about the perfect workmanship, luxurious comfort, as well as the delightful sound. The unavoidable and painful moment is encountered at the retailer's checkout. And I know exactly what I'm talking about, since I paid exactly 2998 marks for the E-303 integrated amplifier in 1981. Certainly, the amp was as dear - and expensive - to me because, as a 19-year-old who was, at the time, doing his military service, this amount was a

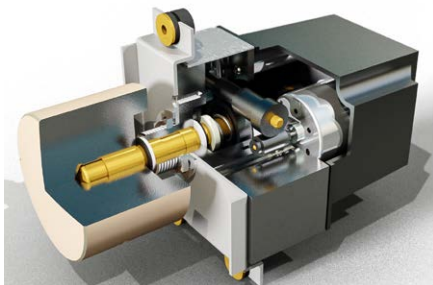
proper fortune and I had to tediously save the money. However, as soon as the Accuphase propelled my Celestion speakers to unprecedented levels, all pain and doubt was forgotten and pure euphoria took their place.

This is what I remembered when the Yokohamian luxury-brand's new preamplifier C-2450, combined with the Class-A power amplifier A-47, was performing superbly in our listening room. Together they are yours for 22,700 Euro. Of course, everyone has to decide for themselves, what they want to spend their more or less hard-earned money on. Nonetheless,

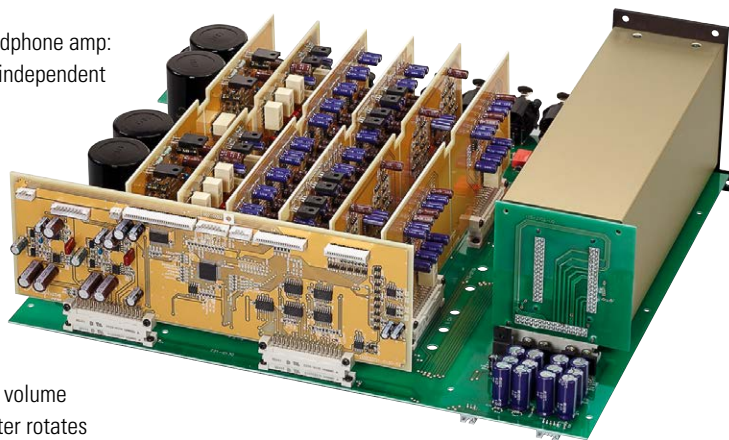
bearing in mind that in Germany the average price for a new car is currently a good 30,000 euros, the Japanese pair no longer seems as horrendously expensive. Especially since the car will probably be rusting on the scrapyard in 15 years, while the Accuphase duo could then, as experience has shown, still be as good as new.

However: such an expenditure is, first and foremost, about the happiness in the here-and-now, as well as the willingness to treat oneself. The financial impact will not be as drastic as it was for me back then, but the excitement will be the same. Because, with the Japanese amps the

Input buffer, AAVA control, balanced output circuit, headphone amp: the basic functions of the C-2450 are performed on six independent boards, separated by channels. ▶



◀ Authentic haptic: the volume knob of the angle adjuster rotates „true to touch“.



lavish opulence in effort and sound, as well as the dedication to an almost excessive accuracy can actually be felt. For example there is the ultra-complex „Accuphase Analog Vari-Gain“ volume control, AAVA for short, which ensures long-term consistency, highest precision and finest gradations. Whereby other manufacturers only use a very precise, traditional potentiometer or level control via resistor banks, the Accuphase developers, who, by the way, constantly change between product groups in order to give fresh ideas a chance, encountered limits in both ways. They, therefore, developed this all-analogue, for each channel individually executed, technology, which converts the signal into 16 differently weighted currents, whose combinations allow the creation of more than 65,500 intermediate values, making tenths-decibel steps possible over a wide range. While nobody needs this mega-resolution, it's undeniably very cool when the digits behind the decimal point run up and down.

Opulence - Precision – Sound

Because the level control, which is mounted in a solid aluminum block and suspended by means of insulators, rotates

as richly and smoothly, as if its axis rotated a grinding potentiometer of the highest quality instead of a sensor mechanism for angle detection, the listener doesn't notice any of this. Further, not only the AAVA works channel separated. The potent power supply of the Pre is comprised of separate banks with smoothing capacitors

TEST-COMPONENTS

- CD-/MULTIPLAYER: Accustic Arts Player I, Accuphase DP-560, T+A MP3100HV
- PRE-/POWER AMP: Accustic Arts Tube Preamp II MK2/Amp II-MK3
- SPEAKERS: B&W 800D3, Dynaudio Contour 60, Gauder Akustik Vescova Bl. Ed.
- CABLE: HMS Suprema, In-Acoustic NF-2404 (NF), HMS Gran Finale Jubilee (LS)

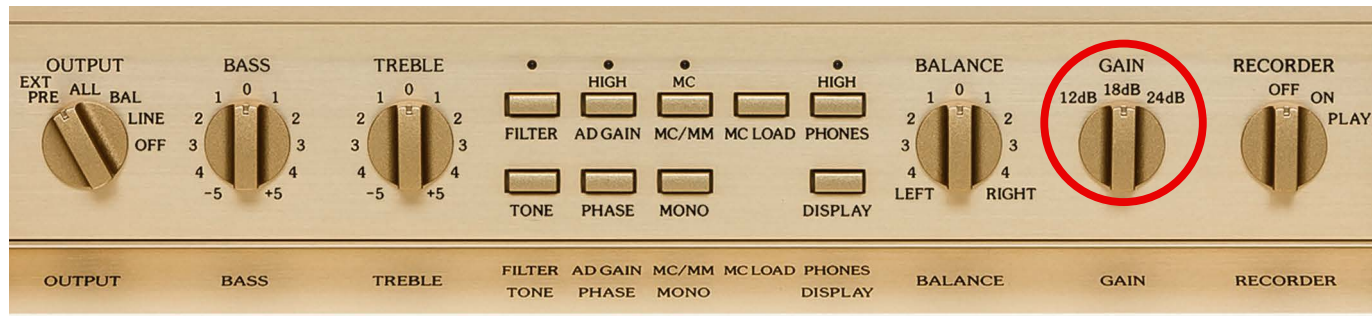
and two transformers. This largely eliminates the risk of mutual interference between the two channels that could distort the spatial imaging.

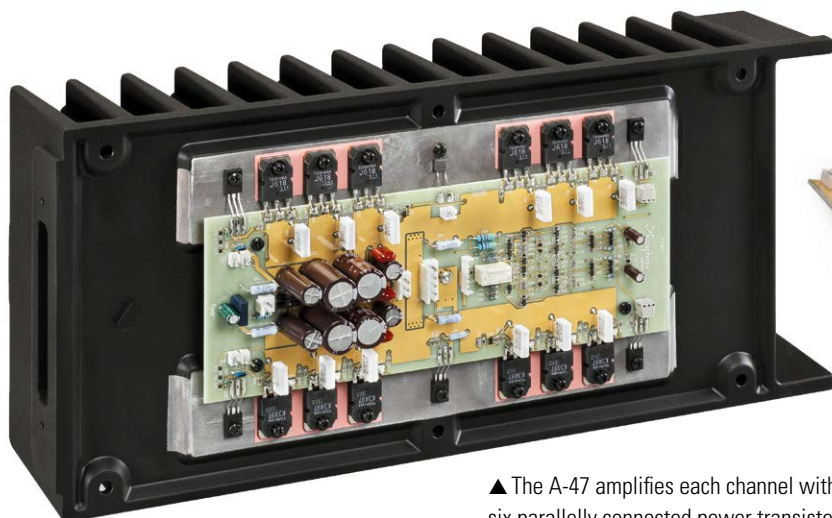
In terms of sound – not surprisingly – the C-2450 fulfills highest expectations by combining, for example, delicate differentiation with homogeneous smoothness, not sounding in any way analytical or superficial despite its exemplary attention to detail and desire to meticulously

dissolve complex structures. Rather, it builds up its finely and dynamically tuned, vividly breathing sound images from the very depths of the room, neither suppressing even the most subtle parts of reverb nor articulation noises, which are gone almost at the moment of their creation. The listener's ear virtually lies on the voices and instruments, while at the same time he is getting an overview of a perfectly organized and, if necessary, out-stretching stage.

One should, however, be aware of one small trap in form of the „Gain“ switch, with which the base amplification level is determined and that lurks behind the lid of the, as is typical for Accuphase, fully equipped preamplifier. Only at the lowest „12 dB“ level, maximum lightness and detachedness is achieved. At six decibels more, the performance, though appearing slightly firmer in itself, isn't quite as light

▼ The preamplifier conceals virtually all its features behind a lid. This also includes controls for the optional phono module. The "Gain"-selector for the base amplification (red circle) has influence on the sound performance. We recommend twelve decibels for maximum naturalness and serenity.





▲ The A-47 amplifies each channel with six parallelly connected power transistors in push-pull arrangement.



▲ The contact between the output board and the generously dimensioned connection terminals is established via metal rails.

and effortless as before. We recommend the 24 dB boost only for very quiet sources, as the superb Pre then starts showing slightly glassy mids and some narrowness. Just give it a try!

As partner for the C-2450, which can, by the way, be supplemented with the highest quality and extensively adjustable phono module AD-2850 for 3885 Euro, we chose the Class-A power amplifier A-47. This is in itself an astonishing amp, because it should be, due to the characteristics of this amplification standard, limited to the 45 watts continuous power per channel, which are specified by the Japanese for eight ohms. Strictly speaking, Class-A means that, in order to avoid takeover distortions when changing from the positive to the negative half wave of

the signal, the constantly working power transistors always feed half of the maximum power, in form of heat, into the cooling system. And, fittingly, the A-47 consumes around 180 watts in idle.

Powerful despite Class-A

However, we have measured more than double the specified power into eight ohm at our one percent distortion limit (see measurements), which proves that the A-47 leaves the Class A range above the stated value and its 24 MOS-FET semiconductors enter switching mode. We could then measure up to 2 x 228 watts, in form of pulses, at four ohms. Nevertheless, the manufacturer should not be accused of deception, because up to the, comparatively modest, “guaranteed

performance“, the promise of pure Class A operation is kept. And with 45 into eight, respectively 90 watts into four, ohms it is of course already loud enough that, even on loudspeakers with average sensitivity, you rarely exceed the Class-A limit, when listening to music.

Apart from the bypassed switching distortions, the entire technical concept of the A-47 is highly devoted to most detailed representations, as the infinitesimally low values for the distortion factor and the intermodulations prove. These, like the high signal-to-noise ratio, are supposed to be due to the elaborately designed, fully symmetrical input stage of the type used in measuring instruments, as well as to the current feedback, which, according to Accuphase, works entirely without phase



◀ As a special feature, the stereo power amplifier can be switched to bi-amping- or monoblock-mode. Large screw terminals secure the cables.

errors, i.e. shifts on the level of time.

In their efforts to eliminate even the last remaining deficiencies, the developers used metal bolts to connect the generously dimensioned, firmly gripping speaker-clamps directly to the circuit board, which contains, for example, the attentive protective circuitry. In the past, usually cables were used.

The amp is driven by a large power supply and can also be bridged to mono-block-or converted to bi-amping-mode, with the signal from one input being fed to both channels, in the latter case. It displays the power via lavishly dimensioned, sensitively twitching level meters that can be switched off on request. As our measuring technician determined, they are very precise. Despite the comparatively high power dissipation, the A-47, which is packed with two large heat sinks, does, even in continuous operation, not exceed body temperature and, therefore, operates silently, in contrast to other Class-A power amplifiers.

From the sound perspective the A-47 is a real Class-A-Accuphase. What does that mean? That its delicately crafted, extremely transparent and in its finesse outstanding performance creates a nearly floating lightness. Down to the lowest registers, the reproduction was airy, detailed and with an elegant attitude. No question, the bass was clear and contoured. However, it never made the impression to be carved out of stone, and was instead graceful, light-footed and agile, just as everything else.

With voices, the A-47 captivated with an almost intimate closeness and sensitivity, which decisively promoted their immediacy and emotional impact. In Radka Toneff's excitingly intense song „The Moon is a Harsh Mistress“ the amp could really shine, as it ran audiophile shivers down our spines. The A-47 wouldn't ever shy away from harder paces either - it has enough power anyway - but it won't ever get really „dirty“, even with rough rock and blues. It is a perfectly flavored amplifier praline, recommended for aesthetes and it is, in that regard, a representative of the entire Accuphase portfolio: certainly not cheap, but of unique pleasure!

Matthias Boede

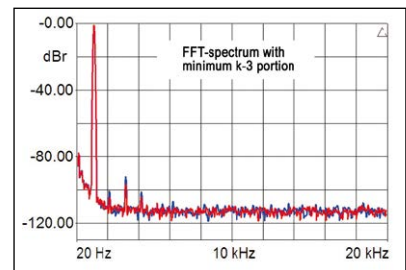
ACCPHASE C-2450



around 12,200 €
 Dimensions: 47 x 15 x 41 cm (WxHxD)
 Warranty: 3 years
 Contact: www.accuphase.com

A preamplifier like out of a dream: workmanship, equipment and sound correspond to the noble appearance including wood-covered metal sides. Inside is a high-tech concept, created as if for eternity. This is reference class!

MEASUREMENT RESULTS



Maximum output voltage (1% THD)	9 V
Distortion factor at 0.03/0.3/1 V	0.008 %/0.0012 %/0.001 %
Intermod. at 0.03/0.3/1 V	0.004 %/0.0007 %/0.002 %
Signal to noise ratio at 0.3/ 0.03 V	101 dB(A)/82 dB(A)
Output resistance RCA/XLR	48 Ohm/97 Ω
Upper cut-off frequency	>80 kHz
Volume control, synchr. error at -60 dB	0.007 dB
Stereo channel separation at 10kHz	92 dB
Power Consumption stby/idle (at)	/31 W(222 volts)

LAB COMMENT: „Accuphase is once again testing the limits of our measurement technology,“ says laboratory manager Uli Apel. Wherever you look, perfect values adorn its protocol. All data was determined at twelve decibels „Gain“.

EQUIPMENT

A total of ten inputs, including one for an external preamplifier in AV-systems, and five outputs make the Pre a universal control center. There is also a headphone jack that can be adjusted to particularly quiet models, a tone and balance control, buttons for phase reversal and mono, a metal remote control and much more.

STEREO - TEST

SOUND QUALITY PREAMP	100%
PRICE/PERFORMANCE	★★★★☆
EXCELLENT	

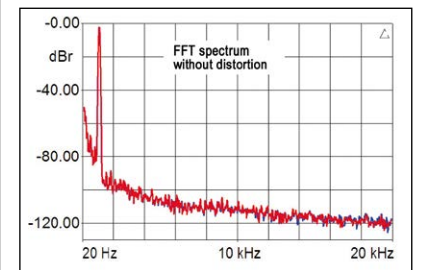
ACCPHASE A-47



around 10,500 €
 Dimensions: 47 x 21 x 47 cm (WxHxD)
 Warranty: 3 Years
 Contact: www.accuphase.com

A superbly crafted power amplifier that offers all the advantages of Class-A operation, but avoids the typical power limitation. Excellently diversified, delicate and spacious sound with breath, aura and pronounced naturalness.

MEASUREMENT RESULTS



Continuous power (8 Ω / 4 Ω)	97 W/170 W
Pulse power 4 Ω (1kHz)	228 W
Distortion factor at 50mW/5W/1dB Pmax	0.005 %/0.001 %/0.001 %
Intermod. 50mW/5W/1dB Pmax	0.001 %/0.0004 %/0.7 %
Signal to noise ratio at 50mW/ 5W	75 dB/92 dB
Attenuation at 4 Ω (63Hz/1kHz/14kHz)	333/250/150
Upper cut-off frequency (-3dB/4 Ω)	>80 kHz
Stereo channel separation at 10kHz	55 dB
Power Consumption stby/idle (at)	/178 W(218 volts)

LAB COMMENT: Despite its usually Class-A operation, the A-47 features high absolute power with the usual low distortion values and high signal-to-noise ratios. At best the intermodulations close to the full modulation are only moderate, but with the levels then realized this won't matter anyway. The high upper cut-off frequency indicates speed.

EQUIPMENT

One pair each of RCA and XLR input jacks, two pairs of individually or jointly accessible speaker groups, mono and bi-amping operation possible, four-stage attenuator for input level, power indicators can be switched off with selectable peak hold function.

STEREO - TEST

SOUND QUALITY	100%
PRICE/PERFORMANCE	★★★★☆
EXCELLENT	