



Yorkville AP Series Amplifiers

	List Price	RS Price
• <u>AP1020 - Amplifier - 2x 400w @ 2 or 4 Ohms</u>	\$699.00	\$559.20
• <u>AP2020 - Amplifier - 2x 600w @ 2 or 4 Ohms</u>	\$1,349.00	\$1,079.20
• <u>AP4020 - Amplifier - 2x 1200w @ 2 Ohms</u>	\$1,599.00	\$1,279.20
• <u>AP4040 - Amplifier - 2x 1200w @ 4 Ohms</u>	\$1,599.00	\$1,279.20
• <u>AP6020 - Amplifier - 2x 2000w @ 2 Ohms</u>	\$2,199.00	\$1,759.20
• <u>AP6040 - Amplifier - 2x 2000w @ 4 Ohms</u>	\$2,299.00	\$1,839.20

ASK ABOUT QUANTITY DISCOUNTS!

AP Features

- Designed for rock solid performance right down to and below their lowest impedance ratings
- Will easily drive reactive phase shifted loads
- Advanced protection schemes including DC current, load, thermal and breaker protection
- User-defeatable peak limiter that is transparent below clipping levels
- 'Soft turn-on' circuit eliminates damage to attached components and prevents nuisance breaker-tripping
- Computer-optimized Silentfan™ front-to-back heat dissipation system
- Long-life, faceplate-mounted, user serviceable, air intake filters
- Front panel Power, Protect, Activity and Clip LED's
- Speakon™ and binding post outputs
- Balanced XLR & 1/4" TRS inputs
- Impedance Mode switch (AP1020 & AP2020)
- Sturdy all-steel construction
- Baked-on, black finish
- Reinforced mounting ears
- User-defeatable limiter circuit
- An amp for all needs - Wattage ratings ranging from 160 watts per channel @ 8 ohms (AP1020) to 4000 watts bridged @ 4 ohms (AP6020)



www.rexroatsound.com 309.764.1663
4531 West High Street Colona, IL 61241



Yorkville AP Series Amplifiers

AudioPro AP-Series power amplifiers are built to withstand heavy-duty live sound reinforcement, touring systems or installation. They are the culmination of Yorkville's forty years of design and manufacturing experience for the music industry, and include features most in demand by audio professionals. They are the ideal choice when high headroom and low distortion are needed, especially when reproducing the dynamic range and clarity of today's digital recordings.

Yorkville's AudioPro AP-Series power amplifiers are designed for rock solid performance right down to and below their lowest impedance ratings. An 'impedance aware' design strategy deals with the realities of driving typical reactive speaker loads and they address the associated problems such as thermal shutdown, inductive 'snap-back', and premature current limiting. They will easily drive reactive phase shifted loads with no difficulty - even though they are still fully protected from accidental short circuits.

AudioPro amplifiers feature advanced protection schemes including DC current, load, thermal and breaker protection as well as a user-defeatable peak limiter that is transparent below clipping levels. A 'soft turn-on' circuit eliminates damage to attached components and prevents nuisance breaker-tripping. The computer-optimized (Silentfan™) front-to-back heat dissipation system incorporates ultra-quiet, variable-speed internal fans and is designed to ensure that excessive thermal stress will not occur. For ease of maintenance and to ensure efficient cooling, the amplifiers are supplied with long-life, faceplate-mounted, user serviceable, air intake filters. Front panel Power, Protect, Activity and Clip LED's are bright and easy to see and all knobs and handles are recessed for safe, easy transportation.

The internal signal path has been optimized and a toroidal transformer is used – both of which serve to reduce hum and noise while keeping weight to a minimum. The two-tier power conversion of the AudioPro AP-Series amplifiers approaches efficiency levels normally associated with switching power supply technology; yet provide the superior transient response and low distortion of the best analog designs.

AudioPro amplifier designs, while unique, are conservative with regard to the power handling capabilities of the output devices. To further assure trouble-free operation, all AudioPro amplifiers undergo a thorough computer-monitored, temperature-cycled, burn-in period to test for any deviation from design parameters.

The back panel features Speakon™ and binding post outputs as well as balanced XLR & 1/4" TRS inputs. The peak limiter, subsonic filter, mono/stereo/bridge mode and ground lift switches are also mounted on the back panel. The unique Yorkville Impedance Mode switch (**AP1020** & **AP2020**), also located on the back panel, allows the user to select full output power into two or four ohms for maximum application flexibility.

Sturdy all-steel construction with a baked-on, black finish is used throughout and, for ease of integration, the amplifiers feature reinforced mounting ears and a compact two or three rack-space design.



All AudioPro amps come with Yorkville's standard two-year (even if you break it!) transferable warranty (valid in USA and Canada only).



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The Limiter Switch

All AudioPro power amplifiers have a user-defeatable limiter circuit switch located on the back panel, next to the input jacks. That limiter is there to protect high frequency loudspeaker components that could be damaged by even small amounts of clipping when an amplifier is being driven close to its maximum output into a full-range cabinet.

When driving subwoofers at the maximum rated output power of the amplifier however, allowing a small amount of clipping at the output of the amplifier is considered an excellent trade-off to get a potential 2dB or 3dB increase in volume, and a small amount of clipping will not damage low frequency drivers. Defeating that limiter allows AudioPro amplifiers to run closer to clipping, and increases the audible volume by potentially as much as 3dB.

Competitive amplifiers without user-defeatable limiting either, A) Set their limiting too high to actually offer any practical real-world high frequency component protection, or B) Set their limiting so low that they limit the amplifier's overall potential headroom.

When comparing AudioPro AP-Series amplifiers to any competitive product, remember to turn the limiter off to feel the increased output when driving subwoofers. However, please note, you should remember to use the limiter when driving full range cabinets. You are less likely to do high frequency component damage with that limiter set to 'on'.

Choosing the Right Amplifier

The AP-Series has a number of amplifiers that appear to deliver the same power, yet are rated into differing minimum loads. The AP4040 and AP4020, or the AP6040 and AP6020 are prime examples. At a first reading of the specification, the AP4040 and AP4020 may look like the same amplifier, yet the AP4040 delivers 1200 watts per channel into a minimum 4-ohm load (per channel), where the AP4020 delivers that same 1200 watts per channel into a 2-ohm load. Looking at the AP6040 and AP6020, again the same amount of power is delivered into differing minimum loads, or 2000 watts per channel into 4 ohms in the AP6040, 2000 watts per channel into 2 ohms the case of the AP6020.

In the case of the AP2020 and AP1020 power amplifiers, a unique minimum load operation switch on the back of the amplifier allows each amplifier to deliver their maximum power into either a 2-ohm or 4-ohm load for maximum flexibility. A simple user definable configuration allows the AP2020 to deliver 600 watts per channel (400 watts per channel in the AP1020) into either a 2-ohm or a 4-ohm load.

Here is where matching the right amplifier to the right speakers becomes vitally important and a brief look at the specification charts of each product will help a great deal when choosing an amplifier for your loudspeaker system.





Yorkville AP Series Amplifiers

AP6040 & AP6020

The AP6040 / AP6020 amplifiers are Yorkville's most powerful, featuring a massive toroidal transformer, rugged design and top quality components, ensuring many years of reliable service. Nearly identical in appearance, the AudioPro AP6040 and AP6020 amplifiers each deliver 2000 watts per channel into 4 ohms and 2 ohms, respectively. They have top-of-the-line specifications, ample headroom and are extremely low noise, making them ideally suited for a wide variety of high-power applications.

AP4040 & AP4020

As the workhorses of the AudioPro AP-Series amplifier line, the AP4040 / AP4020 deliver 1200 watts per channel (at 4-ohms in the AP4040, 2-ohms for the AP4020). Sonic quality is excellent while the proven design and quality components assure many years of trouble free performance.

AP2020

The AP2020 weighs a comfortable but solid 35 pounds, fits into two rack spaces, and has the best distortion and noise specifications you will find anywhere. A simple user definable configuration allows it to deliver 600 continuous average watts per channel into either a 2-ohm or a 4-ohm load.

AP1020

The AP1020 is 400 watts per channel, impedance-selectable, professional quality amplifier providing outstanding reliability and performance in a rugged package. The AP1020 is unique in its class, allowing the user to select between two configurations to allow the amplifier to provide maximum possible output into either 4-ohms or 2-ohms, as the user requires for their particular speaker configuration - much like the impedance-switching feature of the AP2020.

