



**ADK VIENNA/HAMBURG EDITION**  
**User's guide**

**Congratulations on purchasing the ADK "VIENNA" and/or "HAMBURG" EDITION. You now own a fine professional condenser microphone built in the tradition of the best classic European condenser microphones, with many important improvements. Please read this guide completely as it contains important instructions on using and caring about your new ADK product. You will also find tips on how to achieve the best performance of your new unit.**

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## ABOUT THE “VIENNA/HAMBURG EDITIONS”

The ADK “Vienna” or “Hamburg” Edition is actually a development of the very successful A51S. The A51 was the first ADK FET mic and is still being produced, still very popular; the original A51S is basically the same microphone, but with switch-able 10 dB pad and “external” low-cut filter (the A51 has an internal HPF that requires the user to open the mic to switch the filter on/off). The new “Vienna” and “Hamburg” Editions evolved from the A51S. The “Hamburg Edition”, uses similar electronics to the “Vienna Edition” but with a slightly different frequency response and capsule. Two very different flavours, with identical specifications. The ADK A51s was designed with studio use in mind as the main application: the polar pattern is fixed cardioid; the “Vienna” and “Hamburg” models are cardioid only as well. For live applications, a more directional and less sensitive mic would probably be a wiser choice, although the a51S can be used live on guitar amps (PAD on) and drum kits with good success.

The main points in the new VIENNA / HAMBURG models are:

- Increased sensitivity;
- Safer 18 dB pad;
- Smoother low-cut (HPF) circuit;
- Lower noise floor;
- Component-level upgrade for reduced distortion and smoother tone overall;
- New stud-mounted capsule suspension; (!!!)
- New, acoustically more open grille.

More specifically:

- The “Vienna Edition” uses a new edge-connected electrode capsule, that celebrates the classical capsule found in the early C12 and 414 models from AKG. (clearance ?)
- The “Hamburg Edition” uses a central electrode capsule and tailored frequency response that celebrates the capsule found in the Neumann U67. (clearance ?)

The “Vienna Edition” has an open sound with a touch of brightness and tight, linear bass. It’s a classic “Austrian” tone, with lively detail, presence and smooth bass extension.

The “Hamburg Edition” has a more linear top-end with a forward midrange and thicker low midrange. It has a darker tone and more “meat”.

Both microphones have a rather smooth and pleasant response, in contrast to most budget condensers available that exhibit a harsh top end, a hazy bottom and an aggressive midrange. Both models are classic condenser microphones using a clever transformer-balanced, FET + Transistor circuit. Careful component choice and circuit design offers a level of performance that is way above what you would expect by looking at the price tag. For example, WIMA capacitors are used in critical parts of the circuit. They cost more, but perform better and are more reliable than less expensive “equivalents”.

ADK microphones are manufactured in Asia to high standards and the design of the microphones is an effort between America, Asia and Europe. This combination gives the best balance between price and quality. Value has always been a priority at ADK, but quality and TONE always come first. Every ADK prototype has to stand the comparison with the best European vintage microphones before being produced. The goal has always been to offer microphones that give the user access to the great tones of those adored vintage classic transducers but at a price that defies logic! The specifications are on a par with any good vintage microphones and certainly most modern units currently available.

## WARNINGS

The VIENNA / HAMBURG series need +48V Phantom power and won't work properly with lower voltages; in some cases, the microphones won't work at all. Please use professional TRUE +48V Phantom power supplies only. If you are using "budget" mixing desk or external mic preamplifier, you should consider investing in a good stand-alone external Phantom PSU. Please read and keep in mind the following warnings. If you follow these basic rules of condenser microphone care, your ADK mic will give you years of reliable, trouble-free use.

### CAUTION:

**TURNING PHANTOM POWER ON BEFORE PLUGGING IN THE MIC CAN RESULT IN DAMAGE TO YOUR MICROPHONE NOT COVERED BY THE WARRANTY!  
ALWAYS POWER UP AFTER THE MIC HAS BEEN PLUGGED IN!  
DO NOT USE ADK MICS WITH "T-POWER" OR "AB POWER" SUPPLIES!**

### CAUTION:

**ALWAYS MUTE YOUR MONITORING CHAIN BEFORE SWITCHING PHANTOM POWER ON ! ADK WON'T BE HELD RESPONSIBLE FOR ANY DAMAGE CAUSED TO SPEAKERS ETC. IN SUCH CASES.**

### CAUTION:

**CONDENSER MICROPHONES ARE FRAGILE! THE CAPSULE IS A DELICATE, PRECISION TRANSDUCER THAT CAN BE DAMAGED BEYOND REPAIR IF THE MIC IS DROPPED OR KNOCKED HARD. AGAIN THIS IS NOT COVERED BY THE WARRANTY. WITH HIGH SPL DYNAMIC SOURCES LIKE KICK DRUM AND TRUMPET A NYLON OR FOAM POP FILTER SHOULD BE USED TO PROTECT THE CAPSULE FROM VIOLENT BLASTS OF AIR.**

### CAUTION:

**CONDENSER MICROPHONES DO NOT LIKE HUMIDITY. NEVER USE CONDENSER MICROPHONES IN DAMP CONDITIONS. USE A FOAM OR NYLON POP FILTER WITH VOICE OR THE CAPSULE MIGHT "SHUT-DOWN" DUE TO CONDENSATION ACCUMULATING ON THE DIAPHRAGM. IN THIS CASE, PLACE THE MIC IN A DRY ENVIRONMENT AND WAIT UNTIL THE CAPSULE IS DRY AGAIN. IN EXTREME CASES OF HUMIDITY, THE FET COULD BE DAMAGED AND NEED REPLACEMENT!**

## BASIC GUIDELINES and TIPS

Here are some basic guidelines that are meant to give you an overview of typical condenser mic use. These aren't strict rules, just guidelines! After a while you'll feel comfortable using your ADK condenser mic and you'll start using it in more creative ways. But first, the basics:

- Condenser microphones are more sensitive than dynamic microphones, which means that you'll be able to capture finer details than with a dynamic, and that you'll need less preamplifier gain. Usually, you'll need (roughly) about half the gain you'd need with a dynamic. The A51S "Vienna" and "Hamburg" Editions have relatively high sensitivity.
- For high-SPL environment (= loud sources) the PAD should be switched in. Otherwise the head-amp inside the mic will overload. It CAN be used creatively on drums and guitar/bass amps to add "bite" but usually, switch the PAD in with loud sources. The "Vienna" and "Hamburg" Editions have an 18 dB PAD.
- Condenser microphones typically have better frequency response than dynamics, so you'll be able to record a more realistic "image" of the source. Like all the great vintage condensers, both models have "tailored" frequency response: the "Vienna Edition" adds its own colour to the sound: there's a certain roundness from the electronics coupled with the brightness of the capsule: it means that you get extra "detail" or "definition" without harshness. The "Hamburg Edition" has a slightly downwards sloping high frequency response that, coupled to the high midrange-rich capsule, gives the unmistakable "smooth but present" tone of those late 60's/early 70's vocal recordings.
- The low-cut or HPF (High-Pass Filter) circuit was designed to counter-balance "proximity effect". "Proximity effect" is what we call the rise in bass response when a cardioid microphone is used close to the source. The rise is 6dB/octave and it's easy to make a circuit that attenuates bass with the same "slope". The cut-off frequency is 100 Hz, so a typical position of about 6" to 8" off the mic gives a linear bass response with PAD switched IN. That said, the extra "oomph" you get from proximity effect with PAD switched OUT is part of the sound of many classic recordings. The choice is up to you!
- Cardioid mics tend to "ignore" sound coming from the back of the mic. So you can focus on your source without capturing much "room sound" or the instruments at the back of the mic. The ADK "Vienna" and "Hamburg" Editions have unique off-axis response due to the capsule's design. Experiment to get a feel of their behaviour: they act very much like 35mm camera lenses, focusing on the subject rather than on the surroundings.
- ADK mics can give amazing results but remember that the sound coming out of the mic is obviously linked to the sound of the source. A BAD SOURCE OR BAD ACOUSTICS WILL RUIN A TAKE! Whatever mic you use! So always try to get the sound right at the sources, and try to set the source in an "acoustically-friendly" space. The "Vienna Edition" with its extra high frequency detail will tend to also reveal all the flaws of the source. So make sure the source is as good as it can possibly be! The "Hamburg Edition" can actually tame some of the problems, but its forward midrange will tend to emphasise other potential problems... Again, make sure the source sounds good first, then chose your mic depending on the tone/sound you're after.

Here are some more specific tips:

- **Acoustic instruments:** Although small diaphragm condenser mics are usually chosen, the VIENNA / HAMBURG can give outstanding results. Use the “Vienna Edition” for added brightness, or the “Hamburg” for a more mellow, more realistic rendition of the instrument. If you’re close miking, use the low-cut filter. Leave the PAD off for optimum signal to noise ratio. A pair of “Vienna Edition” mics will give acoustic guitars the bigger-than-life sound of modern Country music productions. Try the “Hamburg” for the vintage tones of the great 70’s Folk records.
- **Electric guitars:** They can be used with amps up to around 60 Watts of power. For louder amps, you’ll typically have to use a dynamic mic if you want to close-mike the amp. At “reasonable” levels, switch the PAD in, leave the low cut filter FLAT and place the mic about a foot/foot and a half off the amp. Start with “Vienna Edition” off center or “Hamburg Edition” on-center relative to the cone. Tilt the mic off center for smoother top end. If you want top hear the amp like you’re next to it: add a second A51S at the back of the amp and either mix with the first after flipping the phase of the “back mic”, OR pan the first hard left and the second hard right for a HUGE sound. Of course, don’t be afraid to apply EQ as needed.
- **Electric bass:** PAD in again, at least a foot and a half away; usually the low cut will be needed. On-center placement usually has too much string/pick noise, especially with “Vienna Edition”, although it is sometimes much needed when trying to compete with heavily distorted guitars. A second mic is rarely needed.
- **Drums:** Overheads: PAD in, “Vienna edition” would be the obvious choice for sizzling cymbals or “Hamburg edition” if you’re after the tones of the great blues/rock records of the 70’s. HPF can be left FLAT; on snare, toms etc., PAD in, “Vienna” or “Hamburg” to taste and depending on sound of the drum, HPF FLAT for added “body” or HPF IN for added clarity and more isolation from the kick and floor tom. Floor tom and Kick: PAD in, HPF FLAT or engaged for more clarity, a pop filter on kick to protect the capsule. Heavy Metal kick styles might be extreme for a condenser, which is why a dynamic is usually used.
- **Vocals:** If you’re after the typically smooth but present vocal sound heard throughout the 60’s and 70’s go with the “Hamburg Edition”; if you favour the clear, detailed modern tone, the “Vienna edition” is your best bet. Coupled with a warm tube microphone preamplifier, the “Vienna Edition” can give you the tones you’d hear for example on 50’s Jazz record, with detailed but smooth top end. Obviously, in any case use the mic with which your singer is most comfortable with.

## SPECIFICATIONS

## **“Vienna” and “Hamburg” Editions**

**TYPE:** True condenser pressure gradient fixed-cardioid microphone with custom electronics that honor the euphonic tradition of the vintage European microphones.

**CAPSULE:** 1.07" / 28mm 5 $\mu$  Edge Connected (Vienna) or 1" / 25.4mm 6 $\mu$  Center Connected (Hamburg) gold vapor-deposited diaphragm.

**ELECTRONICS:** Low-Noise European Designed Class A Discrete Fet+ Bi-Polar, Transformer-Coupled Featuring European components in proprietary configurations with electronics scientifically ‘tuned’ to the capsule.

**FREQUENCY RANGE:** 20 Hz to 20 kHz

**SENSITIVITY:** 21mV/pA = -29dBu

**EQUIVALENT NOISE LEVEL:** (A-Weighted per IEC 286-4) < 15dB Typical

**MAXIMUM SPL FOR THD:** <0.5% (1 kHz): 140 dB w/Pad

**SWITCH-ABLE LOW FREQUENCY CUT-OFF:** 1st Order, -3dB @ 100 Hz

**SWITCH-ABLE PAD:** - 18dB

**CONSTRUCTION:** Heavy Duty Aircraft Grade Machined Brass with Durable Scratch Resistant Anodized Finish

**WEIGHT:** 525 grams / 1.16 lbs.

**DIMENSIONS:** 47 x 215 mm / 2 x 8.6"

**OPERATING VOLTAGE:** 48 V Phantom Power

(Please check our website for updates on specifications, etc.)

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