



## AmbiKab® Jr. Owner's Manual

## IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Clean only with dry a cloth.
6. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
7. Do not install near any heat sources, such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
8. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
9. Only use attachments/accessories specified by the manufacturer.
10. Unplug this apparatus during lightning storms or when not used for long periods of time.
11. Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way, such as a power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally or has been dropped.
12. **CAUTION:** To disconnect the unit completely from the Mains, unplug the unit. Turning the power switch off does not completely disconnect the unit from the Mains.
13. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades, with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade and the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
14. The unit shall not be exposed to dripping or splashing of liquids, and that no objects filled with liquids such as vases shall be placed on the unit.
15. **WARNING:** This is a **Class 1** apparatus. This unit should be connected to a MAINS socket outlet with a protective earthing connection.

## EU ENVIRONMENTAL DIRECTIVES

**RoHS** This product is compliant with the EU Directive 2011/65/EU for the Restriction of the use of Certain Hazardous Substances in Electrical and Electronic Equipment. No lead (Pb), cadmium (Cd), mercury (Hg), hexavalent chromium (Cr+6), PBB or PBDE is intentionally added to this device. Any traces of impurities of these substances contained in the parts are below the RoHS specified threshold levels.

**REACH** This product is compliant with the European Union Directive EC1907/2006 for the Registration, Evaluation, Authorization, and Restriction of chemicals (REACH) and contains none or less than 0.1% of the chemicals listed as hazardous chemicals in the REACH regulation.

**WEEE** This symbol on the product or its packaging indicates that this product must not be disposed of with other waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city recycling office or the dealer from whom you purchased the product.

**CE** This product complies with the European Union Council Directives and Standards relating to electromagnetic compatibility EMC Directive (2006/95/EC) and the Low Voltage Directive (2004/10)

## Thank you for purchasing the Komet®AmbiKab® Jr.

Komet Amplification is proud to announce our new, proprietary effects processing AmbiKab® Jr. speaker system. This new innovation provides a unique solution to the age old problem of applying ambient, time-based effects to an amplifier's sound without degrading the original sound in any way. Most guitar players are familiar with the issue: when applied time based effects such as reverb or delay applied before distortion, the sound "washes out" and becomes indistinct. The proper way to apply these types of effects is after the distortion – much as you would in the mix down stage in a recording studio.

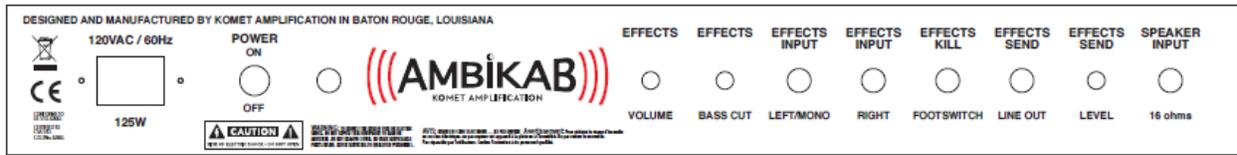
Some amplifiers employ an on board effects loop for this, but that only works as long as the amplifier's output stage itself does not contribute to the distortion. Most classic vintage amplifiers and many non master volume designs such as our Komet amplifier lineup do employ output stage distortion as part of the sonic recipe. It is part of what makes these amplifiers so extraordinarily responsive and rich sounding. Effects loops do not work well in those amplifiers.

This is where the AmbiKab system comes into play. It allows the amplifier to directly drive a set of guitar speakers "dry signal" without any effects added directly to it. A portion of this dry signal is then split off by the AmbiKab's internal circuitry and sent out into an effects unit. From there, a 100% effects signal "wet signal" is fed back into the AmbiKab™ where a separate, internal stereo power amplifier sends the signal to a dedicated set of speakers.

The AmbiKab system features a send level control to accommodate a variety of effects from floor pedals to studio quality rack units. On the return side, a volume control for the internal stereo amp governs the proportion of effects signal that is being added to the guitar sound.

The AmbiKab system can be used with mono effects (both stereo channels bridged) or in full stereo mode. The sonic results of this new cabinet system are astonishing! The amplifier reacts to the player's input as if there were no effects employed at all (as the amplifier never actually "sees" the effects). Additionally, the ratio between wet and dry signals always stays constant, in other words - as the guitar player "rolls down" the volume to clean up the amplifiers sound, or varies their picking dynamics, the effects signal changes proportionally to the amplifiers output signal. Players who have used traditional amplifiers with built in reverb, will be familiar with this problem. If you set your reverb level for your lead sound, the reverb disappears when you roll down your volume for rhythm, and vice versa. The AmbiKab solves this age old problem.

The AmbiKab Jr. gives you a true, studio quality effects sound anywhere, without the hassle of a traditional wet/dry/wet rig requiring additional speaker cabinets, amplifiers, mixers and cables. You just need your favorite amplifier head and cabinet, or combo (with an auxiliary speaker output) effects unit/pedal board and the AmbiKab Jr.



## CONTROL PANEL LAYOUT (left to right):

1. **AC Input:** IEC receptacle accepts standard DIN AC power cable - universal mains.
2. **Power Switch:** engages the wall AC / power to the amplifier.
3. **Pilot Light:** illuminates when power switch is placed in the "On" position.
4. **Effects Volume:** determines the volume of the effect(s).
5. **Effects Bass:** reduces the bass content of the wet signal only.
6. **Effects Input:** (left mono) mono or stereo input from effect pedal / board.
7. **Effects Input:** (right) input from effect pedal / board.
8. **Effects Kill:** allows owner to use a footswitch to disengage the effects signal.
9. **Effects Send:** (line out) send to effects unit input.
10. **Effects Send:** (level) determines the amount of signal sent to the effect's units.

**Speaker Input:** 80K $\Omega$  high impedance allows the AmbiKab system to operate with any: **4 / 8 / 16** Ohm amplifier. You **do not** have to adjust your amplifier's Ohm selector switch. **Special Note:** always use the AmbiKab system with a quality made, "*in phase*" (meaning + to + / - to -) standard speaker cable between the AmbiKab's input and your amplifier's speaker output. We **do not** recommend using an *out of phase* speaker cable with the AmbiKab, you can possibly damage the circuit.

Customer's Folder: <https://drive.google.com/drive/u/0/folders/1Tb6bHKD910yINkahMwzwnwchCPFXtc7vn>

## WHAT THE KOMET® AMBIKAB® Jr. IS

The Komet AmbiKab is a self contained, powered stereo “*wet*” system that allows the user to employ ambient, time-based effects such as reverb and delay (“wet signal”) to the guitar sound independently from the straight guitar amplifier tone (“dry signal”).

## WHAT THE KOMET® AMBIKAB® Jr. DOES

When you plug your guitar amplifier into the AmbiKab's **Speaker Input**, the amplifier, (whether using a combo or head /cabinet rig) is connected directly to the Jr.'s internal **10”** “*wet*” speakers. The **80KΩ** input allows for the AmbiKab system to operate with any **4 / 8 / 16 Ohm** amplifier.

From there, a small portion of the signal is sent back out of the system via the adjustable Line Level jack. This signal is sent to the effects, and then returned to the AmbiKab's **Effects In**, either in mono or in stereo. The AmbiKab's internal dual channel Class D power amp amplifies the effects and powers its own pair of **10”** speakers.

As a result, the amp never “*sees*” the effects and thus sounds and reacts exactly as if there were no effects used at all. The all important: guitar-amp-guitar signal chain - remains pure and unaffected.

## CONNECTING TO THE KOMET® AMBIKAB® Jr.

The Komet AmbiKab Jr. can be used with any guitar amplifier (head and cabinet or combo) that has an auxiliary speaker output jack. This is also the extra parallel speaker jack on the back of an amplifier that is not being used.

1. Connect the AmbiKab's Jr.'s AC input using the grounded IEC power cable to a wall socket.
2. Connect your amplifier to the Ambikab Jr. using a separate speaker cable via the amplifier's auxiliary output (through one of the extra speaker output jacks that is not being used) into the AmbiKab's Jr.'s **Speaker Input** jack using a quality **SPEAKER CABLE** with 1/4” connectors
3. Connect the AmbiKab's **Effects Send** jack to your effects unit's Input jack using a shielded **GUITAR CABLE**.
4. Connect your effects unit's stereo outputs (**Left/Right**) to the AmbiKab's two Effects input jacks using another pair of shielded GUITAR CABLES
5. Engage the Power switch to the “on” position – you may hear a faint popping noise.

**PLEASE NOTE:** If you are using mono effects, use a single shielded GUITAR CABLE from your effects unit's output to the AmbiKab's **Left/Mono** input. This will automatically bridge the AmbiKab's stereo channels and send the mono signal to both effects speaker.

## SETTING THE CONTROLS ON THE KOMET® AMBIKAB® Jr.

1. The **Effects Send Level** control determines the amount of signal sent to the effect's units. Set this control to allow for sufficient signal levels to drive the effects unit without clipping. Some effects will have a clipping indicator, on others you will have to use your ears. If the effects signal is distorting, back off the Effects Send Level. Remember that the AmbiKab sends a portion of the speaker signal to your effects unit. The higher your playing volume, the more signal is being sent. This means that quieter playing situation and lower wattage guitar amplifiers will call for higher settings of the Effects Send Level, and vice versa.
2. The **Effects Volume** control determines the volume of the effect(s) that is coming out of the AmbiKab's effects speakers. In essence, this is your effects level control
3. The **Effects Bass Cut** control can be used to reduce the bass content of the wet signal only. It does not affect the dry guitar signal.

## EXTREME SETTINGS

The AmbiKab Jr. is designed to work with a very wide variety of amplifiers and effects. There can occasionally be situations where extreme settings, such as Effects Send Level and Effects Volume controls turned up all the way in combination with effects units capable of sending extreme levels of signal, can create an internal feedback condition. **This may manifest itself as a sustained howling or bass oscillation noise.** If you encounter this, engage the Bass Cut control and/or reduce Effects Volume until the oscillation noise stops.

## TROUBLESHOOTING

### **Pilot Light Not On:**

Check to see if the amplifier's AC cable is plugged in at wall and plugged in at the IEC connection on the back panel of the amp

### **No Sound:**

Check the speaker connection at back of amp and at the input of the speaker cabinet.

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Check the guitar cables and signal patch cables.

Bypass all effects from pedal board and connect only one pedal from pedal board and test AmbiKab. If the AmbiKab functions with just one pedal, then it is operational. Thoroughly check your pedal board connections and set your pedal board up through the AmbiKab again.

### **Removing Back Panel:**

Please be very careful when removing the back panel for any inspection. The two speaker harnesses will only allow you to open the panel a few inches. You will have to un-plug **the two 10" speaker** harness connections so as to remove the back panel so you can easily have access to your speakers or service panel. These two harnesses plug into receptacles on the power board. Please note the two speaker insertion plugs before unplugging these two harnesses. Make sure you re-install these two harnesses correctly when done.

**ALWAYS make sure the IEC power cable is not plugged into the AC input when opening the back panel.**

## SPECIFICATIONS

- **Dimensions:** 24" X 12" X 13 ¼"
- **Weight:** approx. 29 lbs.
- **Speakers:** two 10" Celestion BN10-200X neodymium speakers.
- **Universal Mains** (operational from 100 to 240VAC / 50 to 60 Hz)

## CONTACT

Komet Amplification  
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Email: [info@kometamps.com](mailto:info@kometamps.com)

Website: [www.kometamps.com](http://www.kometamps.com)

Youtube: <https://www.youtube.com/playlist?reload=9&list=PLZGuW1AhmjpmV4tkf7u55ReJ0IuvjYsNF>

Facebook: <https://www.facebook.com/pages/Komet-Amplification/739410886107995>

Tumblr: <http://kometamplification.tumblr.com/>

Twitter: <https://twitter.com/kometamps>

Customer's Folder: <https://drive.google.com/drive/u/0/folders/1Tb6bHKD9l0yINkahMwzwnwchCPFXtc7vn>

## KOMET® AMPLIFICATION'S WARRANTY

This warranty shall be void and of no force of effect in the event a covered product has been modified in design or function, or subjected to abuse, misuse, (**which includes improper removal of the AmbiKab's pack panel causing damage to wiring harnesses, power amplifier or preamp board, speaker harnesses and speakers**), mishandling or unauthorized repair. Further, product malfunction or deterioration due to normal wear is not covered by this warranty. Komet Amplification warrants their amplifiers to be free from defects in materials and workmanship for a (2) two year period. Komet Amplification will repair or replace any part there of which, upon inspection by Komet Amplification, is found to be defective in materials or workmanship. As a condition to the obligation of Komet™Amplification to repair or replace such a part, the product must be returned to Komet Amplification with a copy of the original and dated sales receipt from the authorized Komet dealer. Komet Amplification's warranty is only applicable to the original owner of the amplifier. Warranty is not transferable.

The Proper Return Authorization must be obtained from Komet Amplification in advance of a return. Please call or e-mail Komet Amplification to receive authorization for warranty repair. All returns must be accompanied by a written statement setting forth the name, address, and daytime telephone number of the owner, together with a brief description of any claimed defects. Parts or product for which replacement is made shall become the property of Komet Amplification. The customer may be responsible for all costs of transportation and insurance, both to and from Komet™Amplification, depending on result of inspection and validation of warranty request. Customer may be required to prepay such costs.

Komet Amplification shall use reasonable efforts to repair or replace any part covered by this limited warranty within thirty days of receipt. In the event repair or replacement shall require more than thirty days, Komet Amplification shall notify the customer accordingly.

**Warranty Exclusions and Limitations:** Notwithstanding the foregoing, all warranty claims are excluded if:

- i. the Product(s) is damaged or destroyed due to the effects of force majeure, including but not limited to: Acts of God, flood, fire; Acts of War, government authority, acts of terrorism, riots, explosions, embargo; Labor difficulty, strikes, breakdown of machinery or equipment, accidents; Shortage or inability to obtain raw materials, equipment, fuel, power, transportation; or Any cause beyond KOMET's reasonable control or due to environmental influences such as wind, hailstones, snow, frost, etc.

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- ii. the Product(s) is damaged from abuse, misuse, improper installation, or neglect;
- iii. the Product(s) is altered or appears to have been attempted repair by unauthorized personnel;
- iv. if the Product(s) has been modified in any way; or if a defective product has remained in use, resulting in consequential damage to the Product(s).

## SHIPPING INSTRUCTIONS

**Note:** Komet Amplification highly recommends that you review all packaging, insurance requirements, and shipping recommendations of the shipping company you intend to use.

Komet suggests using a foam injected, **300** lb. test, corrugated cardboard shipping box.

Komet also suggests having your amplifier professionally packaged to ensure safety.

Shipped amplifiers should be insured for at least the full value.

Please **do not** return ship your amplifier or AmbiKab® with the AC power cable.

We are a commercial address. Please check any corresponding box on shipping label.

Please **do not** return ship using “Home Delivery“ service or Saturday delivery.

Please **do not** send for early morning (before 9:00 A.M.) delivery. We prefer afternoon delivery.

**Note:** Komet Amplification will not be held responsible for any Komet amplifier, amplifier component, or contents, damaged or lost during shipping to Komet Amplification. Komet Amplification will not be held responsible for any damage or loss of an amplifier due to improper packaging or labeling by the customer or packager. Any and all damaged packages and their contents in which claims are filed for damage via shipping to Komet Amplification are between customer and shipper. Komet Amplification will do their absolute best to help any customer with a shipping insurance claim.



## CONTACT

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Youtube: <https://www.youtube.com/playlist?reload=9&list=PLZGuW1AhmjpmV4tkf7u55ReJ0luyjYsNF>

Facebook: <https://www.facebook.com/pages/Komet-Amplification/739410886107995>

Tumblr: <http://kometamplification.tumblr.com/>

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## ICEPOWER 100AS2

Containing a capable fly back power supply with a continuous power capability of 100 Watts and a short-term power of 300 Watts, combined with a 2 x 100 Watt class D amplifier. The 100AS2 is perfect for applications such as stereo *hi-fi* and home automation amplifiers, active speakers, studio monitors as well as 2 channel guitar or bass amplifiers without the need for forced cooling.

### Applications and Key performance Parameters Applications

- Bass amplifiers
- Guitar amplifiers
- Active 2- and 3-way *hi-fi* speakers and studio monitors
- Stereo amplifiers
- Multi-channel amplifiers

### Key Performance Parameters

Output Power per channel: **1 %** THD+N 20 Hz - 20 kHz 100 W (**4Ω**) 50 W (**8Ω**)

Output Power per channel: **10 %** THD+N 20 Hz - 20 kHz 135 W (**4Ω**)

Minimum load impedance: **3Ω**

Maximum amplifier efficiency

Maximum total amp+psu efficiency: **72 %**

Supply voltage input: **85 - 264 VAC**

Peak output current: **12.5 A**

Dynamic range: **109 dB**

Amplifier maximum output voltage per channel: **30 V**

Output referenced idle noise (A-weighted): **75 μV**

THD+N 1 W/1 kHz: **0.006 %**