RBH Series Cabinets

Owner's Manual

210RBH
410RBH
115RBH

GK GALLIEN-KRUEGER

Congratulations

Your purchase of a new Gallien-Krueger RBH Series Cabinet is surely the result of much careful consideration on your part. For our part, we at Gallien-Krueger are pleased that you chose us, and are determined that you will be a satisfied customer. In choosing an RBH Series Cabinet, you own a Speaker Cabinet with many unique features, that can take you where you have never been before.

To get the most out of your new purchase please take a few minutes to read through this manual. Your Cabinet should have come with the following items, please check the contents of the box to ensure that you have everything.

Included with your 210RBH Cabinet:

210RBH	1
RBH Amplifier Clip	2
Owner's Manual	1
Warranty Card	1

Included with your 410RBH or 115RBH Cabinet:

410RBH or 115RBH	1
RBH Amplifier Clip	2
Swivel Castor	4
Owner's Manual	1
Warranty Card	1

If your RBH Cabinet did not come with all the items listed above, or if you encounter problems while setting up your new equipment, please contact your local dealer, or us as soon as possible at:

Gallien-Krueger, Inc.
2240 Paragon Drive
San Jose, CA 95131
phone: (408) 441-7970
fax: (408) 441-8085
Internet: www.gallien-krueger.com

Always Listening

I have never seen the point in doing things the way others have done them. I also have not been very interested in following the latest fad. I am a Stanford educated engineer who worked his way through school as a musician. Like all musicians, I have lugged amplifiers up stairways and into car trunks, always wondering why these things had to be so heavy, bulky, and hard to handle.
As I am the principal innovator at GK, our products reflect my attitudes and life experiences. I don't model my designs after other manufacturer's products (as some of our competitors are proud of reciting). Instead, I believe new and old problems are best solved with new solutions. Having taken our own path, GK products enjoy a unique, unmatched sound, allowing the artist using them every opportunity to make an original statement.
Having supported my products for over thirty years, I have learned from the story they tell. Gallien-Krueger is a reflection of that story, and has a commitment to support that legacy. Just as the products I created thirty years ago are still telling their story, the products we create today will be talking to us tomorrow.
We'll be listening,

Robert Gallien

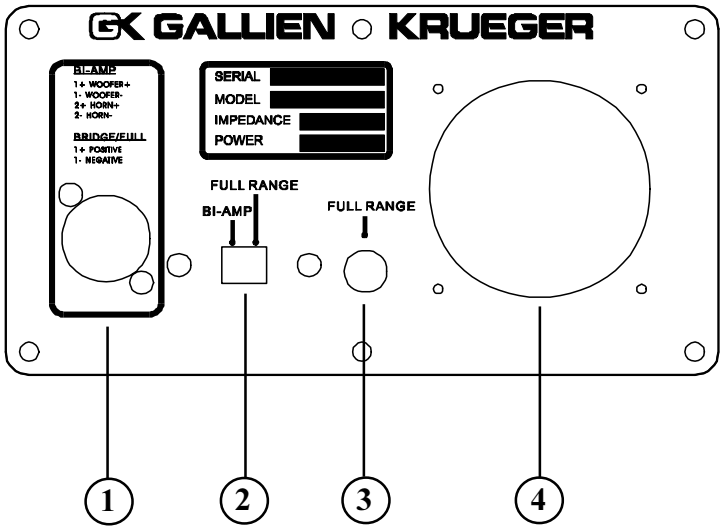
RBH Features

The RBH Series Cabinets are designed to offer the artist the ultimate in sound quality and stage flexibility. They can be played in several positions, upright, stacked on their sides, or rocked back for close monitoring situations. A unique interlocking corner design allows the cabinets to lock together in the various positions. When used in the rocked back position, the included RBH Amp Clip allows GK amplifiers such as the 700RB to be mounted on top.
All RBH cabinets utilize a unique crossover system, providing easy setup for Bi-Amp or Normal (full range) operation. If you have a GK Bi-Amp head, such as the 700RB you can easily gain the benefits of true Bi-Amp operation. Bi-Amp systems use separate power amplifiers for the horn and woofer, with an electronic crossover that separates the sound into highs (for the horn), and lows (for the woofer). This arrangement does two things for the sound:

1) The crossover being electronic, can be far superior to the passive crossover found in full range systems providing a more seamless, accurate sound.

2) With separate power amps for the horn and woofer, the artist can overdrive the woofer power amp (creating the desired growl) while keeping the horn amplifier clean and undistorted. This means the horn can be left on for a crisp, clean high end, while the low end is able to deliver punch and growl. Mono full range systems with passive crossovers can not deliver this type of performance. With a passive crossover system the horn has to be turned off if the power amp is over driven, depriving the artist of the his full sound.

Crossover:



1) Speakon Input Connector:

Allows for bi-amp operation when using the Speakon-Speakon cable provided with any GK Bi-Amp such as the 700RB amplifier. As shown in the picture above, pins 1+ and 1- connect the 350 Watt amplifier to the woofers in the cabinet. Pins 2+ and 2-, connect the 50 Watt amplifier to the horn. By using only pins 1+ and 1- this connector may be used for full range operation with any amplifier.

2) Bi-amp / Full Range Switch:

Switches the crossover between Bi-Amp, and Full Range operation. When using this cabinet with a GK Bi-Amp head such as the 700RB, this switch should be set to Bi-Amp mode. For operation with other mono or bridged amplifiers this switch should be set to full range.

3) Full Range ¼" Input:

Using a standard ¼" speaker cable, this input jack provides full range operation with any bass amplifier head.

4) High Frequency Attenuator:

Adjusts the volume level of the horn when the cabinet is in full range mode. When used in Bi-Amp mode (as with the 700RB), this control is bypassed and the high frequency level is adjusted by using the Tweeter control on the amp front panel.

RBH Cabinet setup up for Bi-Amp Operation:

The Bi-Amp feature of the RBH Cabinets is engaged by setting the crossover switch to Bi-Amp. You must use a true Bi-Amp head such a the GK 700RB, and connect it to the crossover Speakon connector with a 4 conductor Speakon cable (supplied with the GK Bi-Amp head). This setup gives the GK Bi-Amp head complete control of the tweeter and woofer signals sent to your cabinet (the crossover attenuator is bypassed). Now you can push the woofers to the max., while the tweeter remains clean, crisp and free of clipping distortion. In addition, a smooth tight tone is easily dialed up by adjusting the Tweeter and Woofer Master controls on the GK Bi-Amp front panel.

RBH Cabinet setup up for Normal Operation:

The RBH series is configured for normal operation (full range) by setting the crossover switch to full range. In this mode you can use either the ¼" or Speakon connector for operation. If you are using a Speakon cable you must connect the amp positive lead to 1+ and the amp negative lead to 1- on the connector. In this mode the cabinet is setup for full range operation and the tweeter level is controlled by the crossover attenuator control.

RBH Amp Clip:

When installed the RBH amp clip is used to hold the amplifier in place while the cabinet is rocked back. The clip is designed specifically for GK heads like the 700RB. Other heads may be too large or too heavy to use in this manner. To install the clip simply slip it over the front edge of the cabinet top board. Space the clip the same distance as the amplifier feet, with the post facing up. The feet of GK heads like the 700RB will slip snugly over the clip posts and hold the amp in place as the cabinet is rocked back. Other brand heads may be too large to work in this application, so we recommend using only GK heads like the 700RB. See "Detail A" on page 4 for visual instructions.

Specifications

	210RBH	410RBH/8	410RBH/4	115RBH
Cabinet:				
Power Handling:	400W	800W	800W	400W
Impedance:	8 Ohms	8 Ohms	4 Ohms	8 Ohms
Port Style:		Two Front Vents		
Rock Back	Yes	Yes	Yes	Yes
Dimensions:	24''W	24''W	24''W	24''W
	20''H	27.5''H	27.5''H	27.5''H
	15.5''D	18''D	18''D	18''D
Weight:	55 lbs	100 lbs	100 lbs	75 lbs
Covering:		Black Carpet		
Construction		¾ '' Birch With Dado Joints		
Removable Castors	No	Yes	Yes	Yes
Speakers:				
Woofer:	2xP10/200	4xP10/200	4xP10/200	1xP15/400
	Cast Frame	Cast Frame	Cast Frame	Cast Frame
Horn	1xP508	1xP508	1xP508	1xP508
Inputs:				
¼ in full range	Yes	Yes	Yes	Yes
Speakon Bi-Amp	Yes	Yes	Yes	Yes
Cross-Over:				
Passive X-Over	18dB/Oct.	18dB/Oct.	18dB/Oct.	18dB/Oct.
Bi-Amp Mode	Yes	Yes	Yes	Yes
Attenuator	Yes	Yes	Yes	Yes
Horn Protection		Power Compensating		
Performance:				
Sensitivity	103 dB	106 dB	106 dB	103 dB
Usable Response	40 Hz to	31 Hz to	31 Hz to	40 Hz to
	13 kHz	13 kHz	13 kHz	13 kHz

Detail A