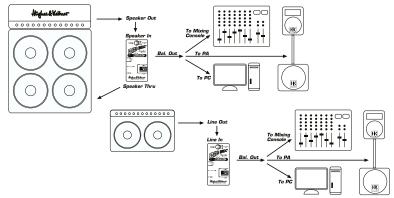




Operating Instructions





The Hughes & Kettner Red Box Classic converts Line Out and Speaker Out signals into balanced, frequency-compensated signals, enabling a direct feed to a mixer. The Red Box Classic features two voicing options, a $4 \times 12^{\circ}$ cabinet and a $2 \times 12^{\circ}$ combo.

Benefits

 No mic required • No sound deviations due to different mics/mic positions • Authentic speaker sound even at low levels • No feedback • No undesirable spillage from other signal sources • No phase cancellations caused by neighboring mics

Setting up and operating the Red Box

- Switch your amp's power off.
- If the mixer desk does not feature phantom power, insert a 9 V E-block battery or connect a suitable AC adaptor (refer to "Technical Specifications")
- Connect all cables as illustrated in the diagram.
 The Red Box activates as soon as you plug a cable into the Line In or Speaker In jacks
- Switch your amp's power back on. Select one of the voicing options, 4x12" or Combo
- To switch the Red Box off, simply unplug the cable to the Line In or Speaker In jack. This cuts its power supply.

Operating the Red Box with tube amps, solid state amps & preamps:

The power amp stage in an all-tube amp is instrumental in shaping your guitar amp's tone, which is why we recommend you tap the power amp speaker signal (**Speaker**) when utilizing a tube amp. The preamp signal (**Line Out**) is preferable for solid state amps due to lower noise levels and superior dynamic response. Always employ the **Line Out** signal when never using a preamp.

CAUTION!

Never operate an amp featuring a tube power stage without a connected speaker or a power-soak resistor with a sufficient load! Hughes & Kettner is not liable for equipment damage caused by erroneous handling of the Red Box. When in doubt consult a qualified technician, especially when dealing with load resistors. Make a habit of connecting the Speaker Thru jack to your speaker/speaker cabinet immediately after connecting the amp's Speaker Out to the Mark III's Speaker In! Ensure the amp is switched off before you begin connecting cables; otherwise the Red Box may be damaged. Ensure all plugs are inserted properly!

Troubleshooting

The Red Box is connected, but no signal is routed to the Balanced Out jack:

• The Red Box is not receiving power. Insert a 9V block battery, plug in the proper adapter, or switch the mixer desk's phantom power on.

 You are using an unbalanced plug adaptor. Its pin assignments do not match the Balanced Out jack's.
 Use a plug and cable corresponding to the diagram above.

The amp's Line Out is connected to the Red Box, but the signal at the Balanced Out jack is too weak:

• Ensure the amp's Line Out signal is properly connected to the Red Box's Line In jack.

The amp's Speaker Out is connected to the Red Box but the signal at the Balanced Out jack is too powerful and is overloading the mixer/recorder's input:

· Ensure the amp's Speaker Out signal is properly

connected to the Red Box's Speaker In jack.

The Balanced Out signal hums:

• The Red Box is not receiving enough power. Check the battery or AC adaptor.

 The amp and the mixer/recorder's earth circuits have formed a ground loop. Activate your amp's or the mixer/recorder's ground lift switch, or use a transformer to galvanically separate the line circuit.

 The connecting cable is poorly positioned and is picking up interference from a nearby source (perhaps a mains cord, transformer, etc.). Replace it with a high-quality cable and move this cord away from the noise source.

Technical Specifications		Line In:	
Balanced Out:	electronically balanced	1/4" jack:	unbalanced
XLR jack	1 = GND/ 2 = + /3 = -	Impedance:	15 K-ohms
Impedance:	600 ohms	Max. level with	
Damping:		9V battery/adaptor:	+ 10 dbV
Line In/ DI Out:	24 db	48V phantom power:	+ 24 dbV
Speaker In/ DI Out:	54 db		
		Power Supply:	
Speaker In:		External adaptor:	9-15 V AC or 9-24 V DC
1/4" jack:	unbalanced	min. of 10 mA Phantom power via	
Impedance:	500 K-ohms	Balanced Out jack:	48 V OC
Max. level with		Battery:	9 V
9 V battery/adaptor:	+40 dbV	Typ. power cons.:	2 mN 9 V - 3 mN 48 V
48 V phantom power:	+54 dbV		
		Character Switch:	4x12"/Combo

4x12"/Combo