Kramer Electronics, Ltd.



USER MANUAL

Model:

810B

Black Burst / Audio Generator

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1 Introduction

Welcome to Kramer Electronics (since 1981): a world of unique, creative and affordable solutions to the infinite range of problems that confront the video, audio and presentation professional on a daily basis. In recent years, we have redesigned and upgraded most of our line, making the best even better! Our 300-plus different models now appear in 8 Groups¹, which are clearly defined by function.

Congratulations on purchasing your Kramer TOOLS **810B** *Black Burst / Audio Generator*! This product is ideal for the testing and aligning of video equipment, including monitors, recorders and projectors.

The package includes the following items:

- 810B Black Burst / Audio Generator
- Power adapter (12V DC Input) and this user manual²

2 Getting Started

We recommend that you:

- Unpack the equipment carefully and save the original box and packaging materials for possible future shipment
- Review the contents of this user manual
- Use Kramer high performance high resolution cables³

3 Your 810B Black Burst / Audio Generator

The **810B** *Black Burst / Audio Generator* produces a high quality black burst video signal in composite video format⁴ and s-Video format⁵. In addition, the **810B** *Black Burst / Audio Generator*:

• Provides a 1 kHz balanced audio output⁶ for audio equipment alignment

2 Download up-to-date Kramer user manuals from the Internet at this URL: http://www.kramerelectronics.com/manuals.html

⁶ You can also use this output as unbalanced audio output



¹ GROUP 1: Distribution Amplifiers; GROUP 2: Video and Audio Switchers, Matrix Switchers and Controllers; GROUP 3: Video, Audio, VGA/XGA Processors; GROUP 4: Interfaces and Sync Processors; GROUP 5: Twisted Pair Interfaces; GROUP 6: Accessories and Rack Adapters; GROUP 7: Scan Converters and Scalers; and GROUP 8: Cables and Connectors

³ The complete list of Kramer cables is on our Web site at http://www.kramerelectronics.com (click "Cables and Connectors" in the Products section)

⁴ Composite video outputs on 2 BNC connectors, items 2 and 3 in Figure 1

⁵ s-Video (Y/C) output on a 4p connector, item 4 in Figure 1

• Enables you to determine the video output standard, PAL or NTSC, by using the PAL/NTSC selector switch¹

Achieving the best performance means:

• Connecting only good quality connection cables, thus avoiding interference, deterioration in signal quality due to poor matching, and elevated noise levels (often associated with low quality cables)

• Avoiding interference from neighboring electrical appliances that may adversely influence signal quality and positioning your Kramer **810B** *Black Burst / Audio Generator* in a location free from moisture and away from excessive sunlight and dust

Figure 1 and Table 1 define the **810B** *Black Burst / Audio Generator*:

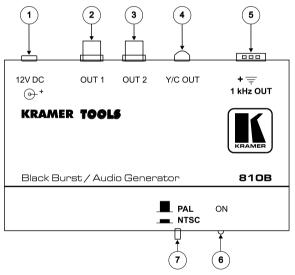


Figure 1: 810B Black Burst / Audio Generator

Table 1: Features and Functions of the 810B Black Burst / Audio Gene	rator
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#	Feature	Function	
1	12V DC	+12V DC connector for powering the unit	
2	OUT 1 BNC Connector	2 Composite video outputs	
3	OUT 2 BNC Connector		
4	Y/C OUT 4p Connector	s-Video output	
5	1 kHz OUT 3-PIN Terminal Block Connector	Balanced (or unbalanced) audio output	
6	ON LED	Illuminates when receiving power	
7	PAL / NTSC Selector Switch	Selects PAL when released; selects NTSC when pushed in	

¹ Item 7 in Figure 1

4 Connecting the 810B Black Burst / Audio Generator

To use your **810B** *Black Burst / Audio Generator*, connect one or more of up to 4 outputs¹, as the example in Figure 2 illustrates:

1. Connect the composite video BNC OUT 1 connector to the composite acceptor (for example, a monitor).

2. Connect the composite video BNC OUT 2 connector to the composite acceptor (for example, an s-Video recorder).

3. Connect the s-Video (Y/C) 4p Y/C OUT connector to the s-Video (Y/C) acceptor (for example, a monitor).

4. Connect the 3-wire cable to the detachable terminal block 1 kHz OUT connector and to the audio input of the destination unit.

5. Connect the 12V DC power adapter to the power socket² and connect the adapter to the mains electricity.

Non-linear Editor Genlockable Camera AV Switcher (Diagnostic)

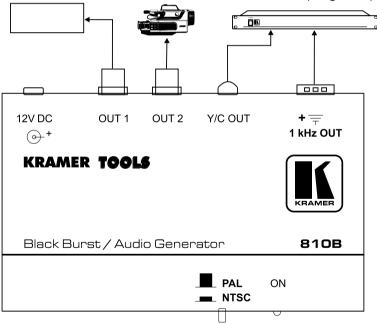


Figure 2: Connecting the 810B Black Burst / Audio Generator

¹ You do not have to connect all the outputs

² Item 1 in Figure 1

5 Adjusting the Audio Level

The **810B** unit comes factory pre-set at 4dBm. However, you can adjust the audio level on your **810B** *Black Burst / Audio Generator*, if you wish.

To adjust the audio level:

1. Insert a screwdriver into the small hole on the underneath of the **810B** *Black Burst / Audio Generator*, enabling access to the trimmer.

2. Carefully rotate the screwdriver, trimming the **810B** unit and adjusting the audio level, as required.

Figure 3 illustrates the position of the small hole on the underneath of the **810B** *Black Burst / Audio Generator*:

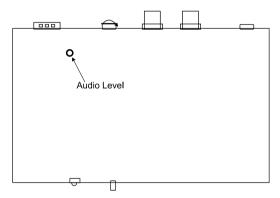


Figure 3: Underside of the 810B Black Burst / Audio Generator

6 Technical Specifications

*Table 2: Technical Specifications*¹ *of the 810B Black Burst / Audio Generator*

Video Outputs:	2 x black burst on BNC connectors; 1Vpp / 75Ω 1 x black burst on 4p connector, 1Vpp / 75Ω (luma), 0.3Vpp / 75Ω (chroma, PAL)
Audio Outputs:	1kHz, 4dBm / 47Ω balanced audio on detachable terminal block
Control:	PAL / NTSC selector switch
Video S/N Ratio:	62dB
Line Jitter:	2ns
Dimensions:	12 cm x 7.5 cm x 2.5 cm (4.7 inch x 2.95 inch 0.98 inch, W, D, H)
Power Source:	12V DC, 230 mA
Weight:	0.3 kg (0.67 lbs.) approx
Accessories:	Power Adapter

¹ Specifications are subject to change without notice

LIMITED WARRANTY

Kramer Electronics (hereafter Kramer) warrants this product free from defects in material and workmanship under the following terms.

HOW LONG IS THE WARRANTY

Labor and parts are warranted for three years from the date of the first customer purchase.

WHO IS PROTECTED?

Only the first purchase customer may enforce this warranty.

WHAT IS COVERED AND WHAT IS NOT COVERED

Except as below, this warranty covers all defects in material or workmanship in this product. The following are not covered by the warranty:

- Any product which is not distributed by Kramer, or which is not purchased from an authorized Kramer dealer. If you are uncertain as to whether a dealer is authorized, please contact Kramer at one of the agents listed in the web site www.kramerelectronics.com.
- 2. Any product, on which the serial number has been defaced, modified or removed.
- 3. Damage, deterioration or malfunction resulting from:
 - i) Accident, misuse, abuse, neglect, fire, water, lightning or other acts of nature
 - ii) Product modification, or failure to follow instructions supplied with the product
 - iii) Repair or attempted repair by anyone not authorized by Kramer
 - iv) Any shipment of the product (claims must be presented to the carrier)
 - v) Removal or installation of the product
 - vi) Any other cause, which does not relate to a product defect
 - vii) Cartons, equipment enclosures, cables or accessories used in conjunction with the product

WHAT WE WILL PAY FOR AND WHAT WE WILL NOT PAY FOR

We will pay labor and material expenses for covered items. We will not pay for the following:

- 1. Removal or installations charges.
- Costs of initial technical adjustments (set-up), including adjustment of user controls or programming. These costs are the responsibility of the Kramer dealer from whom the product was purchased.
- Shipping charges.

HOW YOU CAN GET WARRANTY SERVICE

- 1. To obtain service on you product, you must take or ship it prepaid to any authorized Kramer service center.
- Whenever warranty service is required, the original dated invoice (or a copy) must be presented as proof of warranty coverage, and should be included in any shipment of the product. Please also include in any mailing a contact name, company, address, and a description of the problem(s).
- 3. For the name of the nearest Kramer authorized service center, consult your authorized dealer.

LIMITATION OF IMPLIED WARRANTIES

All implied warranties, including warranties of merchantability and fitness for a particular purpose, are limited in duration to the length of this warranty.

EXCLUSION OF DAMAGES

The liability of Kramer for any effective products is limited to the repair or replacement of the product at our option. Kramer shall not be liable for:

- Damage to other property caused by defects in this product, damages based upon inconvenience, loss of use of the product, loss of time, commercial loss; or:
- Any other damages, whether incidental, consequential or otherwise. Some countries may not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations and exclusions may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights, which vary from place to place. **NOTE**: All products returned to Kramer for service must have prior approval. This may be obtained from your dealer.

This equipment has been tested to determine compliance with the requirements of:

EN-50081:	"Electromagnetic compatibility (EMC);
	generic emission standard.
	Part 1: Residential, commercial and light industry"
EN-50082:	"Electromagnetic compatibility (EMC) generic immunity standard.
	Part 1: Residential, commercial and light industry environment".
CFR-47:	FCC Rules and Regulations:
	Part 15: "Radio frequency devices
	Subpart B – Unintentional radiators"

CAUTION!

- Servicing the machines can only be done by an authorized Kramer technician. Any user who makes changes or modifications to the unit without the expressed approval of the manufacturer will void user authority to operate the equipment.
- ☑ Use the supplied DC power supply to feed power to the machine.
- Dease use recommended interconnection cables to connect the machine to other components.





For the latest information on our products and a list of Kramer distributors, visit our Web site: www.kramerelectronics.com. Updates to this user manual may be found at http://www.kramerelectronics.com/manuals.html. We welcome your questions, comments and feedback.



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