CME

MATRIX

AUDIO MATRIX SYSTEM

Matrix Y

User's Manual

Version 1.0

www.cme-pro.com

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FCC INFORMATION (U.S.A)

1. IMPORTANT NOTICE: DO NOT MODIFY THIS UNIT!
   This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by CME may void your authority, granted by the FCC, to use the product.
2. IMPORTANT: When connecting this product to accessories and/or another product use only high quality shielded cables. Cable(s) supplied with this product MUST be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the USA.
3. NOTE: This product has been tested and found to comply with the limits for a Class B Digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used according to the instructions found in the users manual, may cause interference harmful to the operation of other electronic devices. Compliance with FCC regulations does not guarantee that interference will not occur in all installations. If this product is found to be the source of interference, which can be determined by turning the unit “OFF” and “ON”, please try to eliminate the problems by using one of the following measures:

Relocate either this product or the device that is being affected by the interference.

Utilize power outlets that are on different branch (circuit breaker or fuse) circuits or install AC line filter(s).

In the case of radio or TV interference, relocate/reorient the antenna. If the antenna lead-in is 300 ohm ribbon lead, change the lead-in to co-axial type cable.

If these corrective measures do not produce satisfactory results, please contact the local retailer authorized to distribute this type of product. If you cannot locate the appropriate retailer, please contact CME.

The above statements apply ONLY to those products distributed in the USA.

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Introducing the Matrix Y

The Matrix Y, a part of the Matrix series from CME, for headphone monitoring. Four high quality headphone outputs with independent volume control knobs make the Matrix Y perfect for a variety of different monitoring applications

Matrix Y also features a unique high sensitivity Talk Back Mic on the front panel. This allows Matrix Y users to communicate with each other without taking their headphones off or talking loudly.

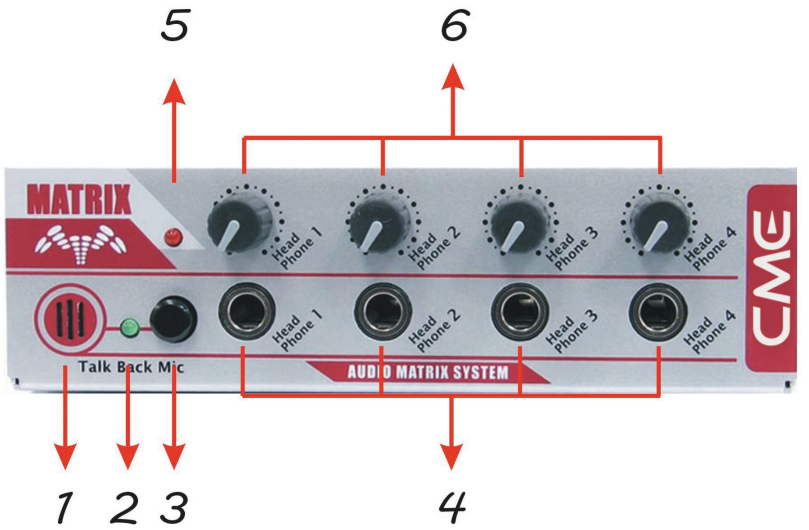
Beside the four headphone outputs, there are balanced Stereo TRS Line In jacks. Users can connect the outputs of mixers, recorders, computer I/Os or another Matrix Y. In addition, the Matrix Y features not only Line Ins, but also balanced Stereo TRS Line Out jacks for connecting another Matrix Y, an extra amplifier or active monitor speakers. You can also connect to the inputs of external recording devices through these Line Out jacks.

Because of the flexibility of having both Line Ins and Outs, there are lots of possibilities for creating different systems with the Matrix Y.

Specification

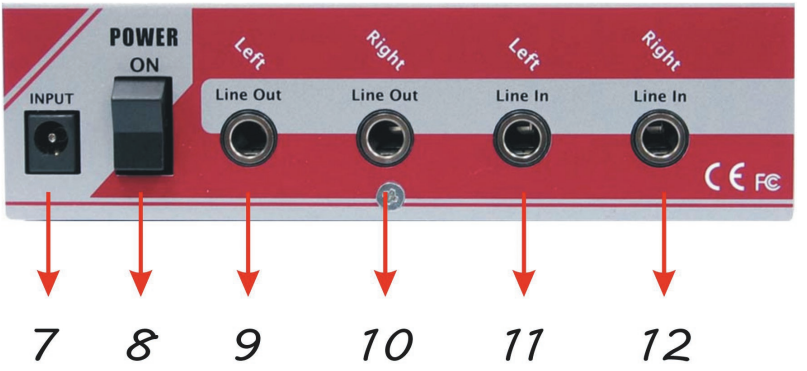
- 4 stereo high quality headphone outputs (1/4" TRS)
- 4 headphone output volume control knobs
  (To adjust the output volume of each headphone independently)
- 1 Talk Back Mic
  (The Talk Back Mic output is sent directly to the four headphone outputs, but not to the Line Outputs)
- 1 Talk Back Mic button.
- 1 Talk Back Mic indicated LED.
- 2 Line In channel (left and right, balanced, 1/4" TRS)
- 2 Line Out channel (left and right, balanced, 1/4" TRS)
- Power switch
- Power adapter (15 VAC 1000mA)

Connections on front panel



1. **Talk Back Mic**
   You can talk to any one who uses headphones connected to that Matrix Y via this Mic. Talk Back signal will be sent to the headphones, but won't affect the signal coming out the Line Out.

2. **Talk Back Mic LED**
   This LED will light up when the Talk Back Mic is activated.
3. **Talk Back Mic button**
   Press down this button to activate Talk Back Mic. Press again to release it and disable Talk Back Mic.
4. **Headphone outputs**
   Four headphone output jacks.
5. **Power LED**
   Power LED will light up when Matrix Y is turned on
6. **Volume control knobs**
   There are four volume control knobs to adjust the corresponding headphone output



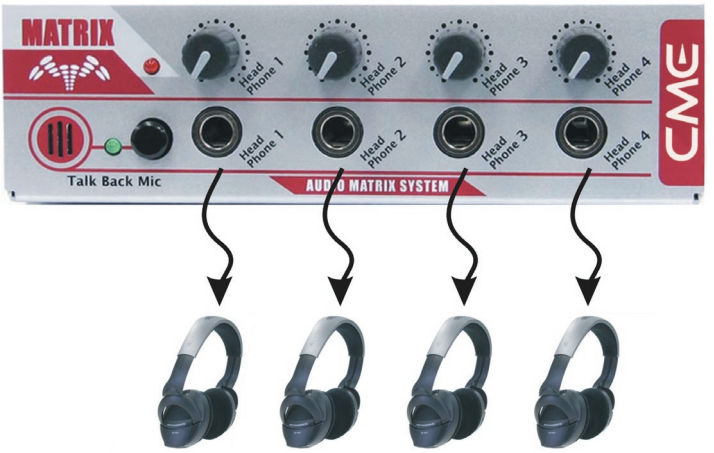
7. **Power Input**
   Plug the attached power adapter (15 VAC 1000mA) here for supplying power to the Matrix Y.
8. **Power On**
   Power switch.
9. **Line Out (Left)**
   Line level signal output, left channel.
10. **Line Out (Right)**
    Line level signal output, right channel.
11. **Line In (Left)**
    Line level signal input, left channel.
12. **Line In (Right)**
    Line level signal input, right channel.

Connection Examples

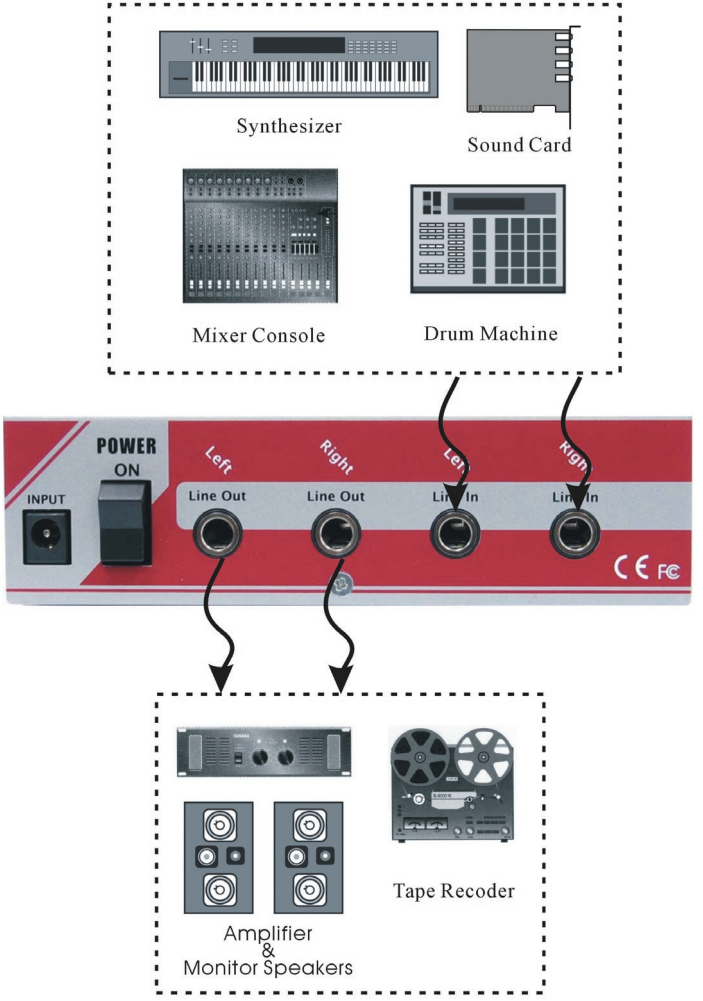
There are many different applications for the Matrix Y since it features balanced inputs and outputs. Below you will find some typical applications.

Using the Matrix Y as a stand-alone device.

Connection examples of front panel

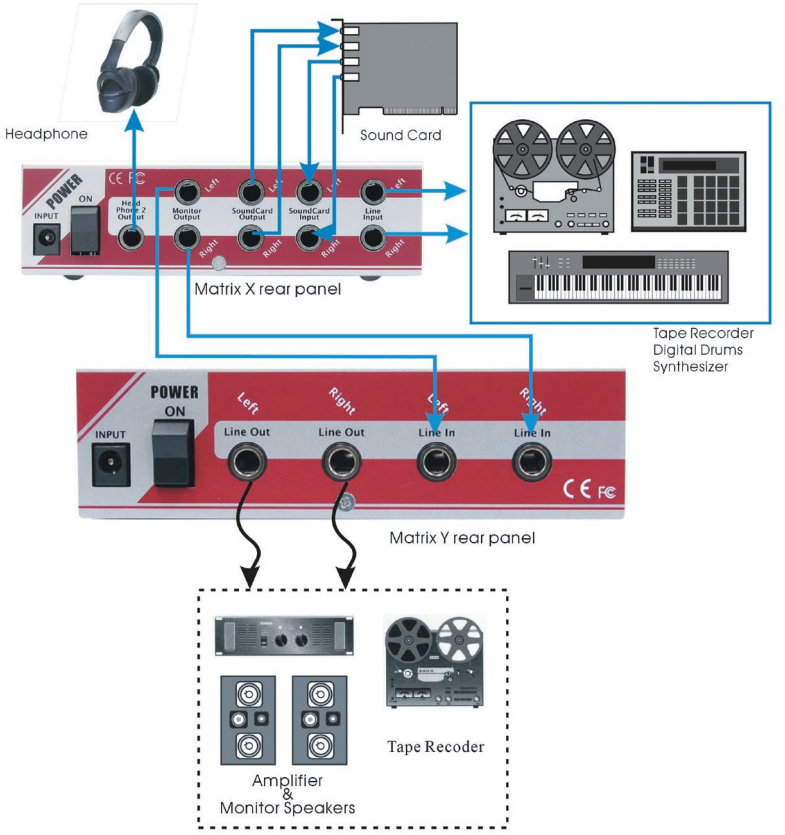


Connection examples of rear panel



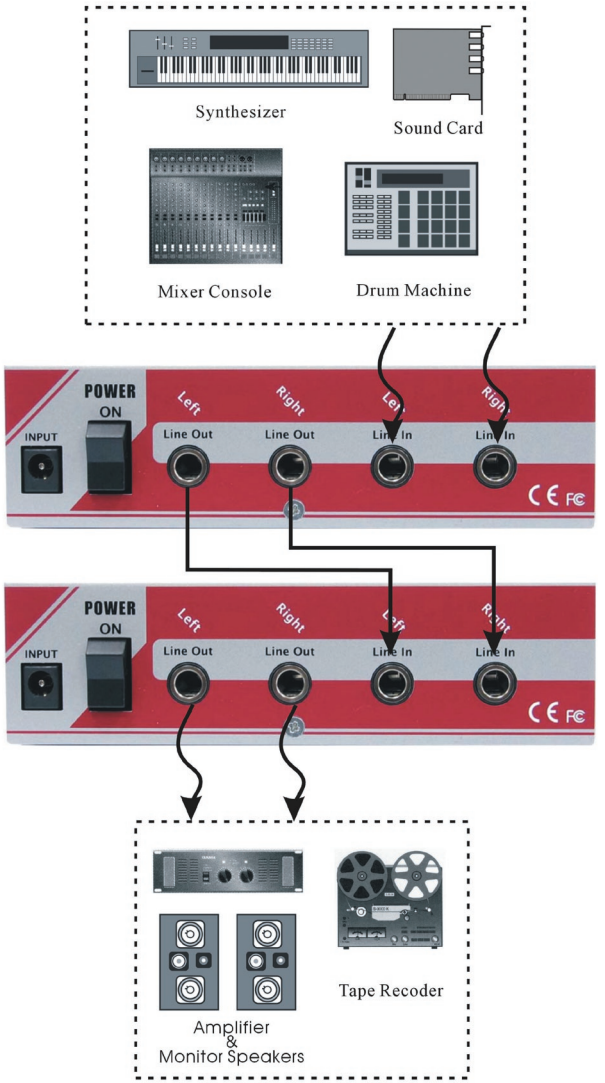
Connecting the Matrix X and Matrix Y

Besides using the Matrix Y as a stand-alone device, you can also connect the Matrix X and Matrix Y together to expand the monitoring capabilities of the Matrix X. Please refer to the Matrix X manual and signal flow diagram.



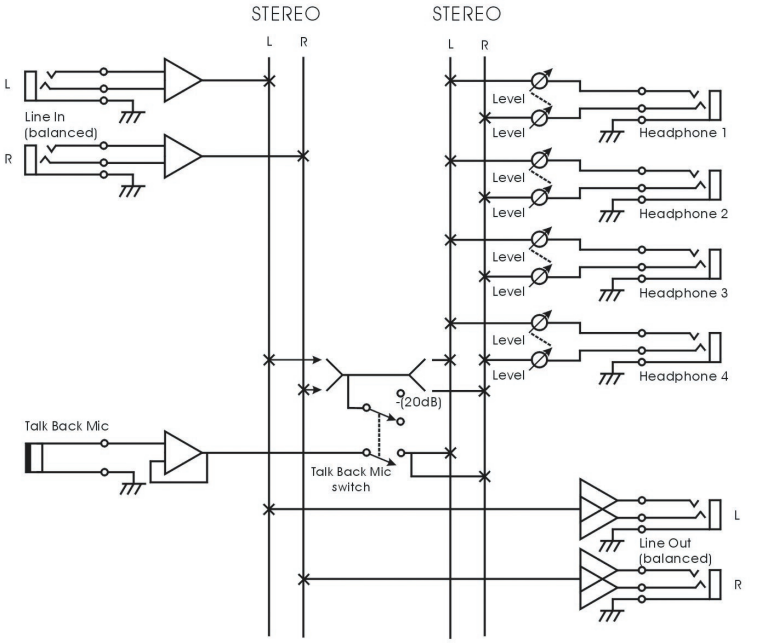
Connecting two Matrix Ys

You can connect two Matrix Ys to expand the number of headphone outputs. Please refer to the connection example below.



Signal Flow Chart (Block Diagram)

The flow chart below shows how signals are routed through the Matrix Y, which may help you better understand how to use it.



Matrix Y Technical information

• Number of Input Channels	2
• Number of Output Channels	2
• Number of Headphone Outputs	4

Performance

• THD + Noise	91dB A-weighted
• Dynamic Range (A-weighted)	105dB

Input

• Connectors (Line In)	1/4” TRS (balanced)
• Input Impedance, Line level TRS	>10K Ohm

Output

• Connectors (Line output)	1/4” TRS (balanced)
• Connectors (headphone)	1/4” TRS
• Output Impedance (line level)	<32 Ohm
• Output Impedance (headphone)	<32 Ohm

Front Panel Controls

• Headphone volume control	+8dB
• Pad	Talk Back Mic switch

Power Supply

• Type	Linear supply
• Input	15 VAC / 1000mA
• Power	15 Watts

Physical

• Dimensions	14.5cm x 15.5cm x 4.3cm

Specifications and appearance are subject to change without notice.