

User Precautions

Introduction

Congratulations on your ownership of a new BrainCore CU audio processor and sincere thanks for your support of the Audiocenter products.

BrainCore CU is a cost-effective 2-in-3-out digital audio processor that supports 96KHz audio processing. The audio processor provides preset packages of AUDIOCENTER speakers. Users can obtain satisfactory sound effects by selecting the corresponding presets according to the audio system recommended by AUDIOCENTER.

Please finish reading the manual before usage, to make sure the best performance of this product. Please keep the manual for reference in the future.

Unpacking

Please inspect the power amplifier carefully immediately after unpacking. If you find any damage, notify your supplier /dealer immediately. Only the shipper may file a damage claim with the carrier for damage incurred during shipping. Be sure to save the carton and all packing materials for the carrier's inspection. If you ever need to ship the unit back to AUDIOCENTER or an authorized service center, you should use only the original factory packing.

Maintenance

There are no spare parts useful for the user or no adjustment is required to open the device, so users should not make any internal adjustments to the processor during its lifetime. It could be a risk of electric shock if opening the upper cover by yourself. Therefore, if you need guidance, please leave it to the technician authorized by AUDIOCENTER. When cleaning the processor, please unplug the power plug from the AC power outlet.

User Responsibility

In order to avoid potential hazards, please ensure that the processor is properly installed, wired, and operated. If you do not follow the instructions, AUDIOCENTER will not be responsible for any damages to the processor.

Installation

BrainCore CU is 1U high. Users can choose different installation methods according to their own needs. Users can install two BrainCore CU processors in a standard 19-inch rack through mounting holes and connectors.

Trouble Shooting		
Symptom	Possible reasons	Solution
Power LED doesn't work.	Cable is not connected correctly	Connect the cable correctly
No sound	Signal input and output channel are not connected correctly	Connect the signal channel correctly
Abnormal sound output	Preset recall is not correct or output channel is not connected correctly	Recall the correct preset and connect to the correct output channel

Installation dimensions

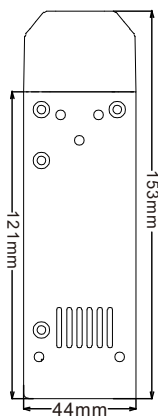
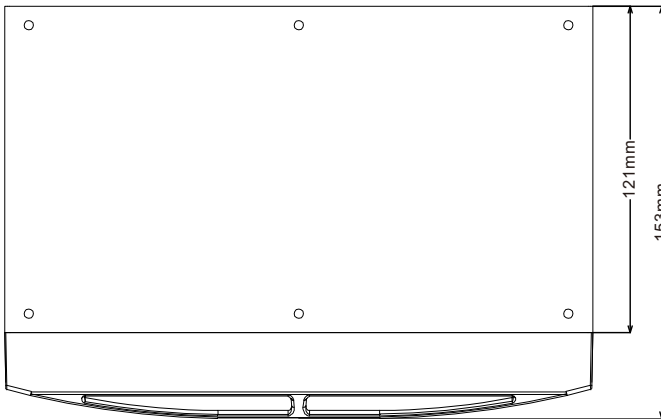
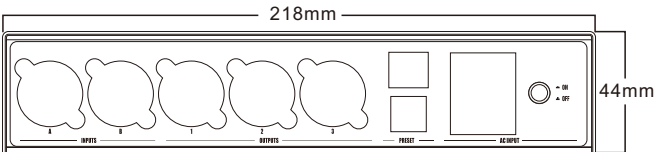
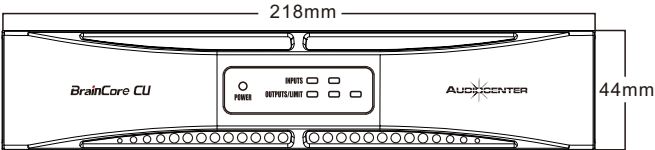
Install 1pc BrainCore CU processor in the rack



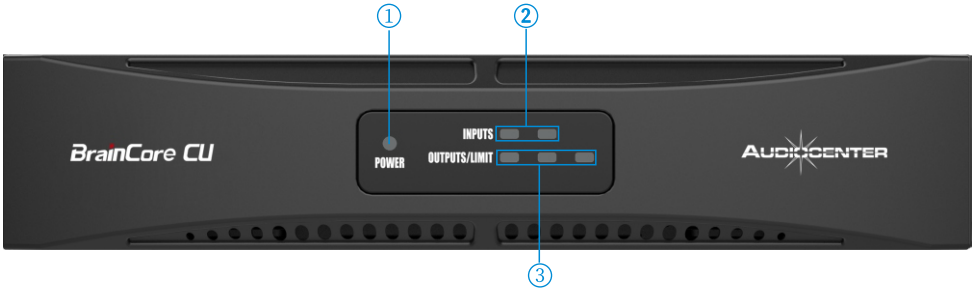
Install 2pc BrainCore CU processor in the rack



BrianCore CU processor dimensions

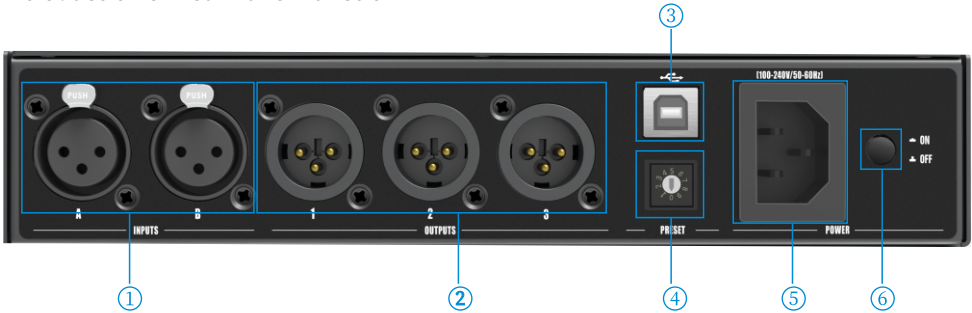


Introduction of Front Panel Function



- 1.Power LED: Power LED turns on when connected the power.
- 2.Input channel signal LED:When the corresponding input channel detects an audio signal input, the indicator will turn on.
- 3.Signal LED/ limiter LED of output channel : When audio signal output is detected in the corresponding output channel, the LED will turn blue. When the LED turns red, it indicates that the limiter circuit is operating.

Introduction of Rear Panel Function



- 1.INPUTS jack: XLR connector (female socket) balanced input, audio signal input port.
- 2.OUTPUTS jack: XLR connector (male socket) in balanced output, audio signal output port.
- 3. USB port: Used to import preset packages.
- 4.PRESET selection switch: built-in typical presets for factory debugging, a total of 10 preset gears can be selected ("0" gear is bypass and is without parameter setting). Users select a matching preset according to the speaker system used.
- 5.Power outlet
- 6.Power switch:When the processor is not in use, please keep its power switch OFF .

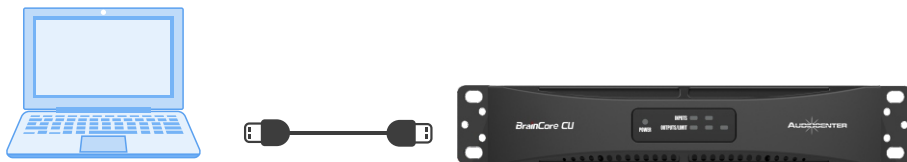
Computer Control Software

Braincore CU provides computer control debugging software, which can be downloaded from the following website:
<http://audiocenter.net/>

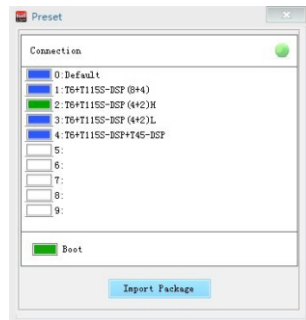
Preset configuration

BrainCore CU has made corresponding preset packages for the classic application of some speaker systems of Audiocenter. Users only need to import the corresponding preset package according to the series of speakers, and then select the matching preset gear according to the speaker combinations. You can get a more satisfactory sound effect. Users need to import preset packages through the "CU Preset" software. The steps are as follows:

1. Connect the BrainCore CU with PC by USB cable, we'll suggest to use the cable within 3meters to insure the stability.



2. Open the "CU Preset" software, and the software can identify and connect the processor automatically (when the connection is successful, the software LED will be green ●). At the same time, you can view the preset list for different packages. For example, as showed in the pictures, the preset packages for Audiocenter's small-and-medium systems (preset 2  2: T6 + T115S-DSP (4 + 2 system) H" is current preset, which is matched with the number 2 preset on the preset switch. You can recall the preset by choose switch number 2 .



3. If it is equipped with other speaker system of Audiocenter, you need to import the corresponding preset package, and click the "Import Package" button to import it (preset packages are stored in the attached USB flash disk).

Preset gear selection

Users import the correct preset package, and also needs to select the correct preset gear according to the combination of speakers used. Users need to select the appropriate preset by rotating the preset switch  on the rear panel of the processor (the "2" gear is selected in the example).

Note: Each time the preset is re-imported, the "preset gear" displayed in the current file is the preset gear that was last saved when the factory made the preset. Users need to restart the processor to display the current position correctly.

Specifications	
Input	Two-way electronic balance
Input impedance	>10KΩ
Output	Three-way electronic balance
Output impedance	<100Ω
Maximum input level	+15dBu
Minimum load impedance	600Ω
Maximum output level	+15dBu
Frequency response	+0.5dB(20Hz-20KHz)
Dynamic range	>106dB
Distortion	<0.01%@1kHz,0dBu
Sampling frequency	96KHz
System time delay	0.25ms (INPUT to OUTPUT @Fs=96kHz)
Power supply voltage	100-240Vac 50/60Hz
Net weight	1.0kg
Dimensions	218x44x153mm