

AUDICENTER

Dynamic Audio Solutions

BrainCore[™]

Technology Inside

User's Manual

WM3210A

Active DSP Wedge Monitor



RevisionA2-2024-02

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◆ Product Introduction

Thank you for purchasing WM3210A Wedge Monitor from Audiocenter. It has integrated technologies of big power digital amplifier and DSP control as well as speakers made of new materials. It is the result of years of R&D effort. We hope that you can use with pleasure just as how we designed it. Please finish reading the manual before usage, to make sure the best performance of WM3210A .
Please keep the manual for future reference.

◆ Safety precautions

When you set up, install and use the WM3210A, please follow the following safety measures strictly:

- There can be danger in any step during hanging installation. Everyone should pay attention to personal safety. All purchasers of Audiocenter should be professional people qualified to conduct the work related to such equipments.
- We strongly suggest the users pay full attention to local rules, regulations and laws.
- Installers have the responsibility to make sure the speaker installations are subject to local rules, regulations, and laws.
- If any danger or defect is detected, measures should be taken immediately to correct it. In touring application, please choose the installation hardware and occasion that can sustain the weight of the equipments.
- Please do not try to hang speakers over the design standard.
- When connecting the cables of the products, please use cable tie to fix the cables, to avoid actors, workers, and audience falling on the wire or brackets and affecting the speaker system.
- Please do not place the speakers near equipments sensitive to magnet fields, such as CRT displayer, TV or data saving materials.
- Please do not place the power cable near heating source. Do not over bend or damage the power cables. Do not place heavy things on it. Please do not place the cables that may be pressed or cause stumbling.
- Only the specified rated voltage should be used for this product. Please refer to the back panel of the product for the specified voltage.
- Only the supplied power cable or plug should be used. (If you need to use the product in a place different from the purchase place, please consult your local Audiocenter distributor.)
- Please check the power cable or plug regularly.
- Please make sure to connect to proper power socket with protection grounding connection.
- Wrong grounding may cause short circuits.
- The product inside does not include any component that can be repaired by users. In case of abnormal operation, please stop using immediately, and contact qualified Audiocenter maintenance worker to repair.
- Please do not use the product in the rain, or near water, or in humid environment, to avoid liquid spilling to any opening.

- When any of the following situations occurs, please cut the power immediately, and pull out the power plug from the socket, and ask qualified Audiocenter maintenance worker to repair.
 - Wear or damage of the power cable or plug.
 - Abnormal smell or smoking
 - Some substance falls into the product
 - Sound stops suddenly when using the product.
- If the product falls or damages, please turn off the power switch immediately. Pull out the power plug from the socket, and ask qualified Audiocenter maintenance worker to repair.
- When pulling out the power plug from the power socket or the product, please make sure to grab the plug instead of the power cable. Pulling the power cable directly may cause damage.
- If the product is not used for long time, or there is thunder storm, please pull out the plug from the socket.
- Please do not place the product in any uneven position. Otherwise, it may cause falling off suddenly.
- If the product is not fixed safely, please do not place it in a position that may cause easy falling.
- Please do not block the air hole. The product has air hole at the back to avoid internal temperature too high. Bad ventilation may cause damage to the product or even fire.
- Please do not hang or install any other component to the handle of the speaker. It may cause damage or injure.
- Please do not press the back panel of the product to the wall. Otherwise the plug may touch the wall and separate from the cable, and cause short circuits, malfunction, or even fire.
- Before connecting the product to other equipment, please turn off the power switch of all equipments. Before turning on or off the power switch of all equipments, please turn down the volume to the minimum.
- Please do not use the product in a very high or uncomfortable volume. Otherwise, it may cause permanent damage to your ear.
- In case of sound distortion, please do not use the product. To Continue using the product in such status may cause fire.
- Using mobile phones near the speaker may cause noise. In case of noise, please use the mobile phone far from the speaker.
- If you need service, please contact Audiocenter service center, agent, or distributor in your area.

▲ In order to avoid to cause you or others body injury and loss on equipment or property, please make sure to follow above basic items.

Package accessories:

- Power cable
- User's manual
- Quality certificate

Please check above items carefully. If any questions, please advise Audiocenter representative, dealers, distributors, or contact by email box: support@ac-pro.net.

Optional accessories:

- Flightcase
- Cover bag

◆ WM3210A Technical Features**WM3210A****● Features:**

1. The innovative BrainCore™ technology and built-in powerful DSP processor improve the performance of the speaker. With Cort™ correction technology and Limita™ processing technology, the system works with safety and reliability and achieves supreme performance.
2. 3 different presets: FLAT, VOCAL, DRUM, users can choose the preset according to their needs via the switch on the back panel.
3. WM3210A adopts customized Class D Amplifier with switch mode power technology, which ensure the system for high efficiency, exquisite and compact outlook, advanced cooling effect and high quality.
4. Moulded large heatsink improves the cooling efficiency, with the result of higher reliability of the system.
5. Front loaded cabinet design lowers the limit of low frequency. The cabinet is very small and compact but can reach very high SPL.

● WM3210A SLEEP function:

WM3210A is equipped with an automatic SLEEP function that saves power when not in use. If WM3210A input terminal does not have an audio signal for 45 minutes (or the volume is minimal), the device will be in SLEEP mode, and the indicator light in front of the speaker will change from blue (working) to red (SLEEP). When the device is in SLEEP mode, if an audio signal appears, the indicator light in front of the speaker will change from red (SLEEP mode) to blue (working mode). When the amplifier is in SLEEP mode, a small amount of current continues to flow in order to awaken the amplifier. It takes about 2 seconds to go from SLEEP to full operation without any sound.

◆ WM3210A Back Panel Control and Function

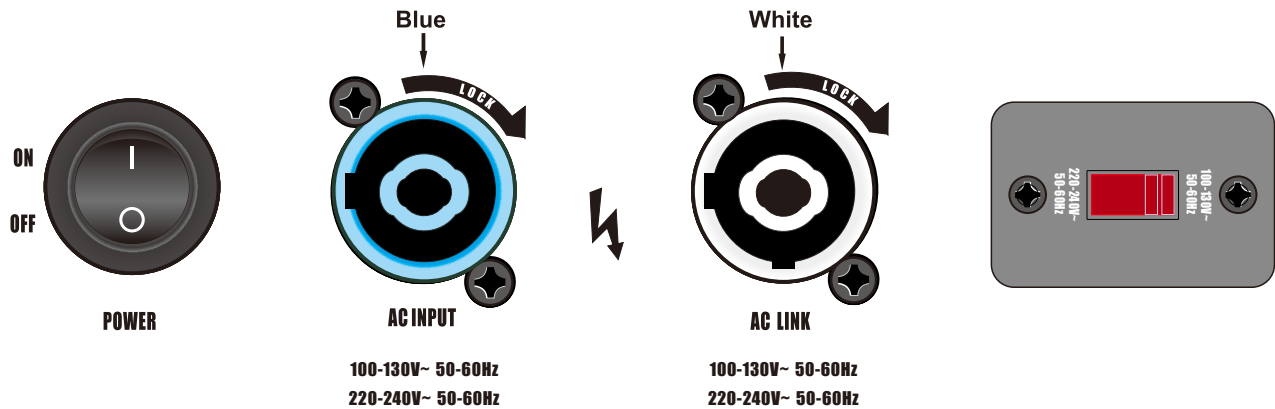


WM3210A Back Panel

- 1 POWER Indicator**
When speaker is connected to power, the LED is on.
- 2 SIGNAL Indicator**
When input signal is detected, the LED will turn on.
- 3 LMITER Indicator**
The LED will turn on when output limiter is activated. If the output of amplifier exceeds the maximum value, the output limiter will be activated, thus damping the output signal.
- 4 PROTECT Indicator**
If there is something wrong with the speaker, the LED will turn on automatically.
- 5 INPUTS Socket(LINE IN)**
Balanced XLR input socket.(LINE IN)
- 6 OUTPUTS Socket(LINE OUT)**
Equilibrium XLR output socket, because it is paralleled to the INPUTS interface(LINE IN), the input signal can bypass without being affected.(LINE OUT).
- 7 PRESET Switch**
There are 3 presets(Flat Vocal Drum) available for WM3210A users can choose the preset according to their needs via the switch on the back panel.
- 8 MASTER VOLUME control knob**
MASTER VOLUME knob controls the gain input signal of all the channels. This control can adjust the sensitivity, so as to control the amount of semaphore sent to the power amplifier and then to the speakers.
- 9 POWER Switch**
Turn the power ON or OFF, pull the switch up to position (I) to turn ON the power, and pull the switch down to the position (O) to turn OFF the power.

10 POWER Connection

WM3210A has a loop-through power connection system. With four cable extensions and one AC power cord, you can power up 5 pcs WM3210A speakers maximum with one single 16 amp/120V(8amp/240V) power supply . The loop-through connection is coded by color(blue=AC INPUT whit=AC LINK)and it has different buckles to ensure proper connection.



11 VOLTAGE Selector

Sets the operating voltage for compatibility with the voltage supply in the country of use.

- ⚠ **Warning!**: The switch on the speaker won't disconnect the AC on the extensions cables. If the AC power is connected to one speaker, all speakers that linked by the cable extensions will be connected.
 1. Make sure all AC power switches are off.
 2. Make sure the AC power cord is not connected. AC power is the last power connection in this sequence.
- ⚠ **Warning!** : With four pcs powerCON extensions and one pc AC power cord, you can power up 5 pcs WM3210A speakers maximum with one single 16 A/120V (8amp/240V) power supply.If you are using the power cable, make sure all the cables are connected well before connecting to the main power supply.
 3. Make sure the white powerCON connector is connected well with the AC LINK port on the speaker.
 4. Turn the powerCON connector clockwise until it locks well.

5. Make sure the blue powerCON cable is connected well with the AC INPUT port on the speaker.
6. Turn the powerCON connector clockwise until it locks well.
7. Repeat above step until all the speakers are properly connected (Please follow up the suggestions of the maximum speakers you can connect).
8. Completely insert the blue powerCON connector on the AC power cord into the blue AC INPUT connector on the first amplifier in the signal chain.
9. Turn the powerCON cable connector clockwise until it locks into place.
10. Plug the other end of the power cord into the appropriate AC power supply.
11. Now you can turn on the AC power switch using the power-on procedure in this document.

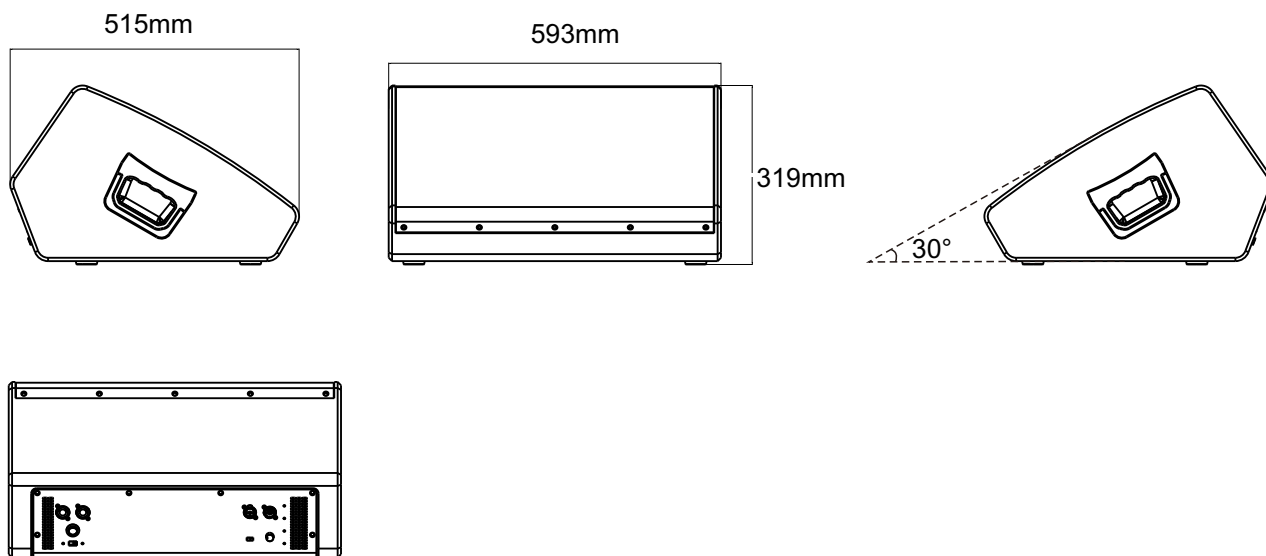
Power-on sequence

1. Turn the input level of the mixer (or other source) that inputs the speakers to the lowest value.
2. Turn on all audio equipment (CD player, mixer, instrument).

▲ NOTE: WM3210A has a universal power supply that supports system operation with AC input voltage from 100-240V (50/60Hz). Please only use the correct power cable which supports above voltage input.

◆ Dimension of WM3210A

WM3210A



◆ WM3210A Specification

SPECIFICATIONS		WM3210A
Frequency Response(-10dB)		55Hz-20kHz
Directivity -6dB(H°×V°)		60° x 90°
Maximum Calculated SPL/1M	Continuous	122dB
	Program	125dB
	Peak	128dB
Drivers	HF	Customized driver, 1.0" exit, 1.75" voice coil
	LF	Customized 2x10" driver, 2.0" voice coil
DSP		
Processor		48kHz signal sampling frequency, FIR filtering
Presets		FLAT, VOCAL, DRUM
AMPLIFIER		
Amplifier		Class D
Power(RMS standards)		1100W
Peak Power		2200W
Frequency Response(1W 8Ω 2ch)		20Hz-20kHz(±0.5dB)
Intermodulation Distortion (20Hz-20kHz, half power)		<0.05%
Total Harmonic Distortion (20Hz-20kHz, Rated power 8Ω)		<0.05%
Cooling		Cooling with fans ,air convection
Protection		DC protection,Short circuit protection,Overheat protection,Output overload protection, Soft startup protection,Overvoltage protection,Undervoltage protection
Signal Input/Output Connector		Female XLR for input, Male XLR for output
Power Input/Output Connector		Power connector
Working Voltage		100V-130V~ or 220V-240V~(±10%,50/60Hz)
Power consumption (1/8 output power)		82W
CABINET		
Cabinet Material		CNC machined plywood
Cabinet Color		Black is the default color. Contact Audiocenter for customization
Grille		Iron mesh
Handles		2 side
Cabinet Monitor Angle		30°
Optional Accessories		Cover / Flightcase
Speaker Dimension(W×H×D)		593×320×515mm
Carton Dimensions(W×H×D)		571×684×418mm
Net Weight		19.0 kg
Shipping Weight		22.0 kg
Technical Support and After-sales Service		Global application support team

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◆ **Trouble Shooting**

Symptom	Possible reasons	Solution
No sound	Cable not connected correctly. Or too small gain.	Connect with input socket correctly. Adjust speaker output gain input bigger.
Feedback in the sound	Microphone is toward to speaker Sound is too high.	Speaker should be far away from the microphone sound pickup area to reduce the output gain, making the microphone closer to the sound source.
Sound Discrepancy from different speakers .	Different gain for different speakers	Put the same gain for different speakers.
Sound distortion	Input volume is too big Output volume is too big	Reduce the input volume of the equipments Reduce the output gain of the speakers, make the Limiter LED lighted a bit.



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