



ESSERIES

LOUDSPEAKERS BEYOND LIMITS

USER MANUAL



ES208 / ES208A

ES210 / ES210A

ES212 / ES212A

ES215 / ES215A

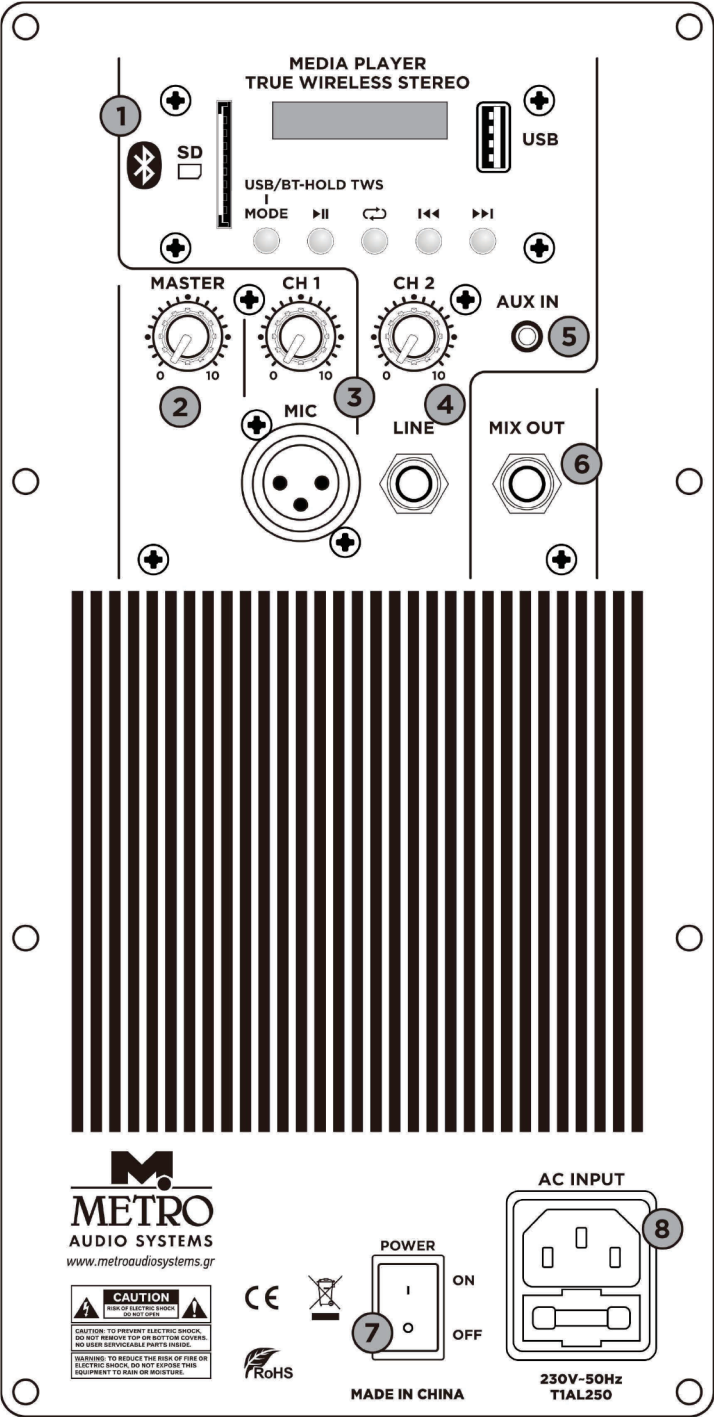
2 SAFETY INSTRUCTIONS

- 1.** Please read the manual carefully and keep it for future reference.
- 2.** All safety instructions and warnings must be adhered to. They are part of the manual and must be kept with the manual.
- 3.** Any guarantee claims are rendered invalid if damage occurs due to non-observance of these operating instructions. We assume no liability for any consequent damage.
- 4.** We assume no liability for personal injury or damage to property caused by incorrect handling or nonobservance of the safety instructions. Any guarantee claims expire in such cases.
- 5.** Unauthorized conversions and/or modifications of the appliance are not permitted for safety and licensing reasons (CE).
- 6.** The appliance is approved for operation in dry, closed rooms only. Do not operate the device nearby water, such as in bathrooms or nearby swimming pools.
- 7.** The appliance may not be exposed to extreme temperatures ($< +5^{\circ}\text{C}/> +35^{\circ}\text{C}$) in operation.
- 8.** The appliance may not be subjected to strong vibrations or heavy mechanical strain.
- 9.** The appliance may not be exposed to excessive moisture (due to dripping or sprayed water, for example).
- 10.** Do not place any recipients filled with liquids, such as glasses or vases, on top of or directly next to the appliance. They could fall over, causing water to enter the appliance. Never pour out liquids above the appliance. Do not place any small objects, such as coins or paper clips, on the appliance since they could fall inside the appliance. You run a high risk of causing a fire or life-threatening electrocution! If any liquid or objects enter the appliance nevertheless, pull the mains plug out of the socket immediately and contact a specialist.
- 11.** The appliance has been constructed according to protection class I. The power plug must only be plugged into a protection class I outlet. The voltage and frequency must exactly be the same as stated on the device. Wrong voltages or power outlets can lead to the destruction of the device and to lethal electrical shock.
- 12.** The operating voltage of the amplifier mains socket is 240 Vac, 50/60 Hz, and it serves as the power source for the appliance. Never attempt to operate the appliance with any other voltage.
- 13.** Only pull the mains plug out of the socket by the intended gripping surface. Do not pull it by the cable.
- 14.** Never plug the mains plug in or out with damp or wet hands.

- 15.** Always pull the mains plug out of the mains socket:
- 16.** Electrical appliances must be kept out of the reach of children. Be particularly careful if children are present. Children are not aware of the hazards involved in handling electrical appliances improperly. Children could attempt to poke objects into the appliance. There is a life-threatening danger of electric shock.
- 17.** Do not leave the appliance unattended while operating it.
- 18.** Never place the appliance on an unstable or movable surface. Persons could be injured or the appliance damaged by it falling down.
- 19.** Live components can be exposed by opening covers or removing components (unless this can be done without tools). Contact points can also be live. If the appliance has to be opened in order to calibrate, service, repair or replace components or assemblies, all of its poles must be disconnected from all sources of voltage first. If the appliance has to be kept open and under voltage during maintenance or repairs, this work may only be carried out by a specialist who is familiar with the risks involved and the relevant regulations.
- 20.** Never connect the appliance directly after transferring it from a cold to a warm room. The condensation water that forms could destroy the appliance or result in an electric shock. Allow the device to reach room temperature before connecting it. Wait until the condensation water has evaporated. This can take some hours.
- 21.** Do not place any naked flames such as those of burning candles on or next to the appliance.
- 22.** Do not place the appliance on soft surfaces such as carpets or beds. Do not cover the air vents of the appliance. Do not obstruct the air circulation with objects such as magazines, table cloths or curtains. This prevents the dissipation of heat from the appliance and can result in overheating.
- 23.** Only use the appliance in a moderate climate, not in tropical environments.
- 24.** All persons involved in operating, installing and servicing the appliance and putting it into service must be trained and qualified accordingly and observe these operating instructions.
- 25.** Defective mains cables may only be replaced by specialists. Danger of shock hazard!
- 26.** Do not leave the packaging material lying around carelessly since it can become a source of danger for children playing with it.
- 27.** The accident prevention regulations and the regulations of the employers' liability insurance association should be observed at commercial institutions.
- 28.** If you are unsure about the correct connection or have any questions that are not answered in the operating instructions, please do not hesitate to contact the authorized dealer. Consult a specialist if you are in doubt about the operating principle or the safety of the product.

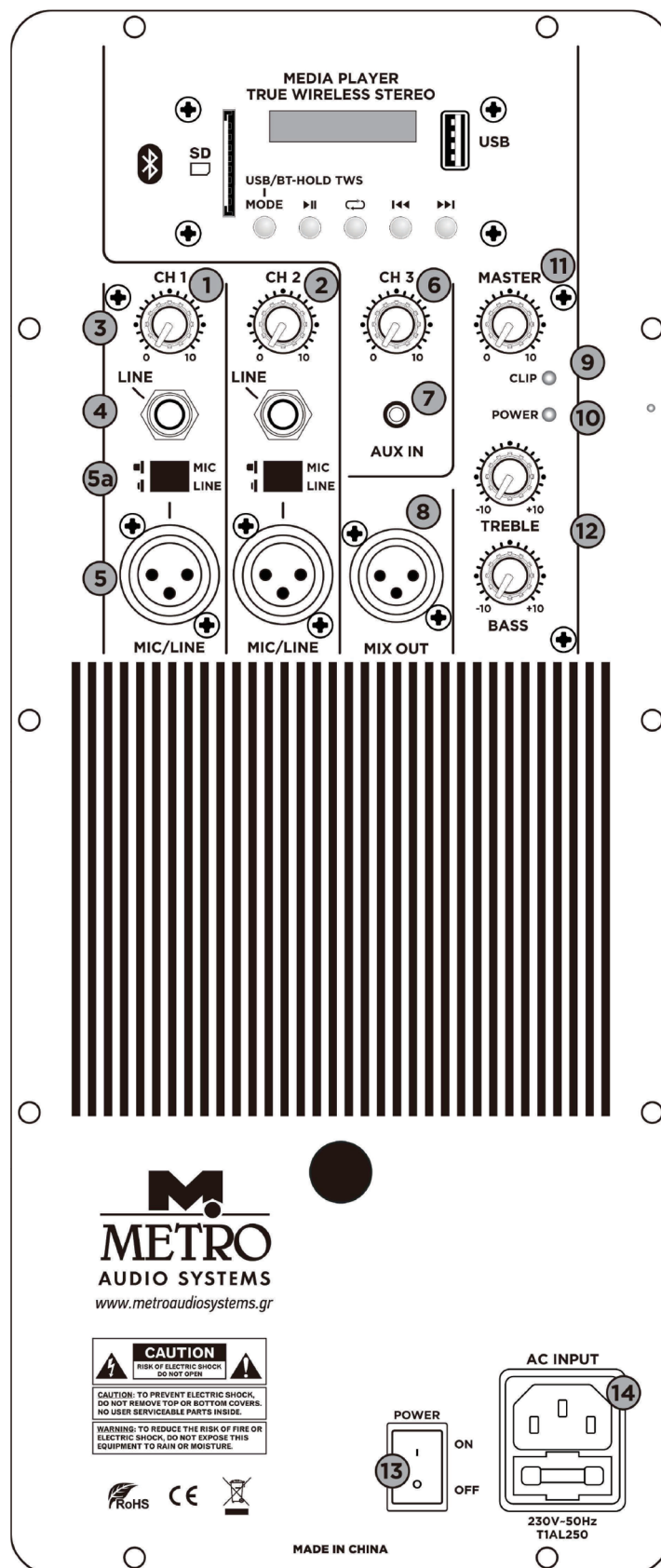
3 OPERATING ELEMENTS & CONNECTIONS

ES208A / ES210A



- 1. MEDIA PLAYER:** A versatile onboard player accepting SD card, USB thumb drive and connection via Bluetooth. In addition to this, a second cabinet can be connected via Bluetooth using the TWS (True Wireless Stereo) feature. See page 5 for more information.
- 2. MASTER VOLUME:** Controls the overall level of your system.
- 3. CH1:** A mono Input channel with Level control and XLR Mic Input. Suitable for balanced or unbalanced low level/low impedance device eg.-mic (200-600ohms) or electro-acoustic guitar.
- 4. CH2:** A mono Input channel with Level control and 6.3mm jack input. For Line Level devices, this input is suitable for a keyboard or drum machine for example.
- 5. AUX IN:** A stereo Input for the connection of a Line Level device via the 3.5mm jack input. Please use a stereo cable when connecting to this Input. The Aux level is adjustable via the by channel 2 Level control.
- 6. MIX OUT:** A BALANCED signal feed which can be used to connect a second Vector cab (daisy chained - see page 8), active wedge monitor, house PA or recording console for example.
- 7. MAINS SWITCH:** Turns the system on and off. Ensure the level controls are at minimum when switching on and off.
- 8. MAINS INLET SOCKET AND FUSE:** IEC input for connection of an appropriate mains lead. Only replace fuse with the type indicated.

ES212A / ES215A



1/2. CH1 and CH2: Mono Input channels.

3. LEVEL: Use the Level control to set the channel volume.

4. LINE INPUT: An unbalanced input - for higher output line level devices eg.- keyboard, processor, drum machine.

5/5a. MIC/LINE INPUT: Use the push button to switch the XLR Skt between:

MIC: a balanced input for low level, low impedance devices eg.-mic (200-600 Ohms) or electro-acoustic guitar.

LINE (via XLR Input): A balanced input for higher output line level devices eg.- keyboard/drum machine.

6. CH3 LEVEL: Use this control to adjust the level of the onboard USB/SD player or an external (line level) signal feed connected to the AUX IN.

7. AUX IN: This gives you the option to connect an additional line level device. Control the Level with CH3 Level control. Please use a stereo cable.

8. MIX OUT: A balanced signal output to connect a second speaker or recording device.

9. POWER LED: This will illuminate when the unit is powered up. There is also a second power LED on the front of the cab.

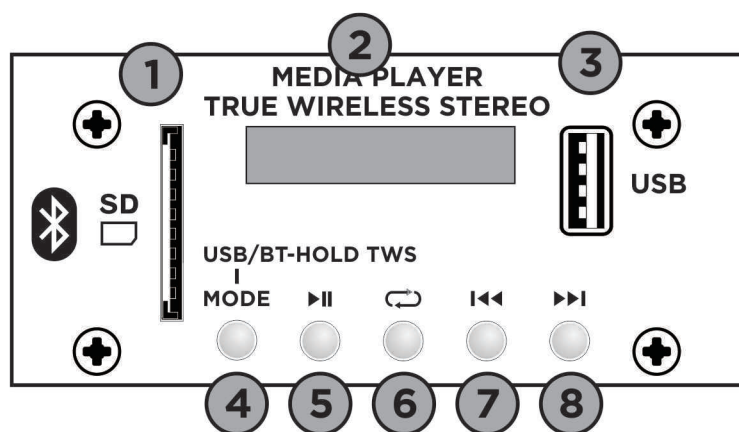
10. CLIP LED: Illuminates just before the amplifier begins to clip. Adjust the level controls and signal level from your source so this illuminates only briefly on peaks in the music.

11. MASTER VOLUME: Controls the overall level of your speaker.

12. Active BASS and TREBLE: These controls allow you to boost or cut the low/high frequency response of the amplifier.

13. MAINS SWITCH: Turns the system on and off. Ensure the level controls are at minimum when switching on and off.

14. MAINS INLET SOCKET AND FUSE: IEC input for connection of an appropriate mains lead. Only replace fuse with the type indicated.



MEDIA PLAYER (ALL MODELS)

Use the onboard player for playing MP3 encoded audio tracks from SD card/USB or Bluetooth® device.

- 1. SD CARD SLOT:** Insert your standard SD card here. (Automatically detected on insertion, or if removed and reinserted uses smart technology to resume play from the previous point).
- 2. DISPLAY SCREEN:** Display track information.
- 3. MEMORY STICK SLOT:** Connect your USB thumb drive here. If removed and reinserted, the system uses smart technology to resume play from the previous point.
NOTE. The USB socket is for the playback of recorded tracks only, not for charging a USB device.
- 4. MODE:** Select the input source - SD card USB, Bluetooth.
- 5. PLAY/PAUSE:** Use this control to play or pause your MP3 music/backing track.
- 6. LOOP:** Use this to enable/disable the looped playback modes.
- 7. PREVIOUS:** Press to skip to the preceding track. A prolonged press will reduce the volume of the MP3 player.
- 8. NEXT:** Press to skip to the next track. A prolonged press will increase the volume of the MP3 player.

CONNECT TO BLUETOOTH DEVICE:

- a. Toggle through the system modes and select Bluetooth (using MODE switch (4)).
- b. On your Bluetooth capable device, make sure Bluetooth is enabled.
- c. Your Vector enclosure is now connected to your Bluetooth device and controlled using the PLAY/PAUSE, PREVIOUS and NEXT BUTTONS.
- d. Switching between a USB device and a Bluetooth device is possible, but the Bluetooth device will need to be re-selected by pressing the MODE button once.

ES208 / ES210 / ES212 / ES215

Choosing an Appropriate Power Amplifier

Connect this speaker system to an appropriate power amplifier, otherwise damage may occur. If several speakers are connected the impedance decreases correspondingly. Please make sure that the power amplifier is qualified for your intended use.

Example for the calculation number of speakers/impedance.

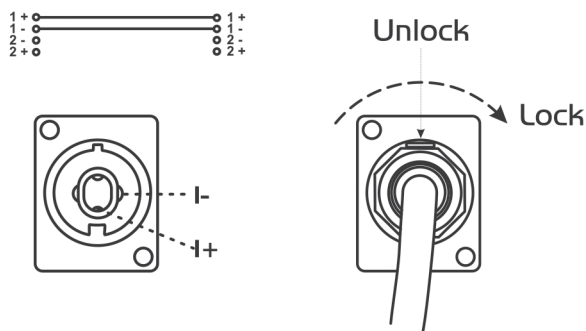
Number of speakers	\triangle Impedance
1 speaker at 8 Ω	8 Ω
2 speakers at 8 Ω each	4 Ω (parallel)
2 speakers at 8 Ω each	16 Ω (in line)
3 speakers at 8 Ω each	2.66 Ω (parallel)
3 speakers at 8 Ω each	24 Ω (in line)
4 speakers at 8 Ω each	2 Ω (parallel)

The input impedance of the speaker systems should at least be the same or even higher than the output impedance of the amplifier.

Making the Connections

1. If the PA system is turned on, turn it off before making any connection.
2. The speaker system is equipped with lockable Speaker sockets. These are connected in parallel. For locking a connection turn the plug to the right. For unlocking pull the unlock button and turn the plug to the left and pull it out of the socket.
3. Connect the input jack INPUT to the output of the amplifier.
4. The feedthrough signal is present at the output jack LINK, e.g. for connecting the input of another speaker system.

Pin occupation of the Speaker jacks:



Information on Installing Audio Cables

- Always treat cables carefully and protect them from damages during transportation.
- Install cables always in a structured way and protect them from damage.
- Cables must be installed in a way that no person can stumble over them. Always fix cables with an appropriate tape.
- Cables should be installed directly (no loops, S-shaped overlengths).
- Always install cables far away from power cables (never closely parallel).
- Never put heavy objects like speaker systems, flightcases etc. on cables.
- Never operate cables wound up.

4 TECHNICAL SPECIFICATIONS

ACTIVE SPEAKERS

Model:	ES 208A	ES 210A
Type:	Active PA Speaker	Active PA Speaker
Power supply:	230V AC, 50Hz	230V AC, 50Hz
Frequency response:	90Hz-19KHz	80Hz-19KHz
Power output(RMS/peak):	60W/240W	80W/320W
Amplification:	Class AB	Class AB
Max.SPL(peak):	107dB	111dB
LF transducer:	8"Woofer 1.18"Voice coil	10"Woofer 1.5"Voice coil
HF transducer:	1"Exit-1" Compression Driver	1"Exit-1" Compression Driver
Dispersion:	90°x 60°	90°x 60°
Crossover frequency:	3.5KHz	3.2KHz
Connectors:	input:AUX/Bluetooth/UCB/SD/XLR/JACK	input:AUX/Bluetooth/UCB/SD/XLR/JACK
	output:6.3mm JACK	output:6.3mm JACK
Dimensions (HxWxD):	425*270*250mm	495*290*283mm
Net Weight:	6.8kg	8.2kg
Gross Weight:	7.8kg	9.3kg

Model:	ES 212A	ES 215A
Type:	Active PA Speaker	Active PA Speaker
Power supply:	230V AC, 50Hz	230V AC, 50Hz
Frequency response:	65Hz-19KHz	55Hz-19KHz
Power output(RMS/peak):	150W/600W	200W/800W
Amplification:	Class AB	Class AB
Max.SPL(peak):	114dB	116dB
LF transducer:	12"Woofer 2"Voice coil	15"Woofer 2"Voice coil
HF transducer:	1"Exit-1" Compression Driver	1"Exit-1" Compression Driver
Dispersion:	90°x 60°	90°x 60°
Crossover frequency:	3.2KHz	3KHz
Connectors:	input:AUX/Bluetooth/UCB/SD/XLR/JACK	input:AUX/Bluetooth/UCB/SD/XLR/JACK
	output:XLR	output:XLR
Dimensions (HxWxD):	595*350*348mm	685*418*379mm
Net Weight:	12.2kg	14.7kg
Gross Weight:	13.8kg	16.7kg

PASSIVE SPEAKERS

Model:	ES 208	ES 210
Type:	2-Way Passive Speaker	2-Way Passive Speaker
Frequency response:	75Hz-19KHz	65Hz-19KHz
Power output(RMS/peak):	80W/320W	120W/480W
Max.SPL(peak):	111dB	115dB
LF transducer:	8" Woofer 1.18" Voice coil	10" Woofer 1.5" Voice coil
HF transducer:	1" Exit-1" Compression Driver	1" Exit-1" Compression Driver
Dispersion:	90°x 60°	90°x 60°
Crossover frequency:	3.5KHz	3.2KHz
Connectors Input:	1x Speakon	1x Speakon
Connectors Output:	1x Speakon	1x Speakon
Dimensions (HxWxD):	425*270*250mm	495*290*283mm
Net Weight:	5.5kg	6.8kg
Gross Weight:	6.3kg	7.7kg

Model:	ES 212	ES 215
Type:	2-Way Passive Speaker	2-Way Passive Speaker
Frequency response:	50Hz-19KHz	45Hz-19KHz
Power output(RMS/peak):	150W/600W	200W/800W
Max.SPL(peak):	120dB	122dB
LF transducer:	12" Woofer 1.5" Voice coil	15" Woofer 2" Voice coil
HF transducer:	1" Exit-1" Compression Driver	1" Exit-1" Compression Driver
Dispersion:	90°x 60°	90°x 60°
Crossover frequency:	3.2KHz	3KHz
Connectors Input:	1x Speakon	1x Speakon
Connectors Output:	1x Speakon	1x Speakon
Dimensions (HxWxD):	595*350*348mm	685*418*379mm
Net Weight:	10.3kg	12.8kg
Gross Weight:	11.7kg	14.5kg

ES SERIES

LOUDSPEAKERS BEYOND LIMITS



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