

e apart

PRE ZONE 1

PROFESSIONAL PREAMPLIFIER



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ON - STANDBY

## **PREZONE1**

Instruction manual



PREZONE1 manual



## IMPORTANT SAFETY INSTRUCTIONS




- Read these instructions - All the safety and operating instructions should be read before this product is operated.
- Keep these instructions - The safety and operating instructions should be retained for future reference.
- Heed all warnings - All warnings on the appliance and in the operating instructions should be adhered to.
- Follow all instructions - All operating and use instructions should be followed.
- This professional device needs to be installed by qualified personnel only.
- Danger: Exposure to high sound levels may cause a permanent hearing loss. Individuals vary considerably to sound pressure level induced hearing loss but nearly everyone will lose some hearing if exposed to high sound pressure levels for a sufficient amount of time. Therefore it is recommended that all persons exposed to equipment capable of producing high sound pressure levels, such as this amplifier, be protected by hearing protection while installing or operating this unit.
- Make sure to only use power outlets conform to the power requirements listed on the back of the unit.
- Do not connect the inputs / outputs of amplifiers or consoles to any other voltage source, such as a battery, mains source, or power supply, regardless of whether the amplifier or console is turned on or off.
- Do not drive the inputs with a signal level higher than that required to drive equipment to full output.
- Do not run the output of any amplifier back into another input.
- This unit has NOT been designed for use in mobile applications, such as: mobile discobars, mobile PA systems, Live bands, audio rental systems, ... Using it in such application will lead to product damages and safety risks.
- Do not use this apparatus near water
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarised or grounding plug.  
A polarised plug has two blades with one wider than the other. A grounding plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. Always use the device with a grounded mains power plug. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on, pinched or damaged. Particularly at the plugs, connectors and at the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Unplug the apparatus during lightning storms or when unused for long periods of time.
- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart or rack is used, use



caution when moving the cart/apparatus combination to avoid injury from tip-over.

- Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- **WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. The apparatus shall not be exposed to dripping or splashing and that objects filled with liquids, such as vases, shall not be placed on apparatus.
- **WARNING:** The mains plug/appliance coupler is used as disconnect device, the disconnect device shall remain readily operable.

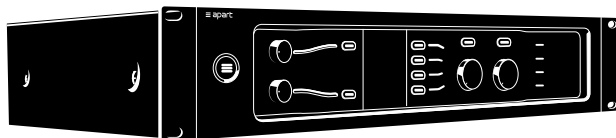


- This lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of non-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.
  - **Warning:** To reduce the risk of electric shock, do not remove cover (or back) as there are no user-serviceable parts inside. Refer servicing to qualified personnel.
  - The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the appliance.
-  Caution: To reduce the risk of electric shock.
-  Protective earthing terminal. The apparatus should be connected to a mains socket outlet with a protective earthing connection.
-  Correct Disposal of this product. This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.
- No naked flame sources, such as lighted candles, should be placed on the apparatus.
- Minimum 5 cm distances around the apparatus for sufficient ventilation.
- Do not install this equipment in a confined or building-in space such as a book case or similar unit, and remain a well ventilation conditions at open site. The ventilation should not be impeded by covering the ventilation openings with items such as newspaper, table-cloths, curtains etc.
- The use of apparatus in moderate climates.

## Introduction

### “Providing the missing link”

There is a huge demand for preamplifiers with multiple zone applications in the fixed install audio market today. Although there are a lot of products available, none are able to satisfy both installers and users. The overall connectivity and use of existing products remain a battle to install and operate. Thanks to the input from our partners and the comprehensive research of our R&D department we succeeded in creating the ultimate pre-amplifier range “the PREZONE Series”. Apart Audio together with a world leading design company completely redesigned the “preamplifier” as we know it today.



The result is the revolutionary Apart PREZONE1 a multi-functional stereo preamplifier that allows you to independently control the volume in 2 stereo zones. It gives you the possibility to mix the 2 microphone levels easily with a music sources. The innovative design of the front will instantly indicate how to operate the progressive PREZONE1. The logical rear panel will give every installer an instant understanding on how to install the unit. It's easy to distinguish the PREZONE1 from its competitors. Its higher signal to noise ratio, ease-of-use, logical design and versatile features makes it suitable for almost every professional audio application.

## Features

- 19" rack unit, 2U high with removable rack ears
- Patented front panel designed to create an intuitive user interface.
- Front control for end-user and back panel for configuration installer (out of reach of end-user)
- Universal switching mode power supply
- No cooling fan - maintenance free
- 3 priority levels for audio routing
- Dedicated isolated emergency input with vox and mute all switch
- 2 mic / line inputs with tone controls and phantom power (48V)
- 4 stereo line inputs on RCA connectors
- 2 zone outputs with tone balance controls
- Balanced and unbalanced outputs for each zone
- Mono / stereo switch for each zone output
- Signal clip indicators and gain control on all inputs for fast and easy configuration of the input gain
- Front button standby with low power consumption

## Connections



1. **Emergency input:** connect your balanced 0 dBV line level emergency input audio signal to the euroblock connector. If available, connect the emergency contact to the "mute all" connection. The contact must be "potential free", i.e. a relay or switch contact that does not carry any voltage. Alternatively, activate the "vox" circuitry by turning the vox control until you hear an audible "click". Now turn the vox control up while playing music until the vox circuit is activated. The vox and the mute all switch have the same function: they will mute all other sources, and will wake up the unit from standby (auto standby and front button standby). The emergency level can be set with the volume control. If the clip led lights up when the emergency signal is present, lower the level of the emergency signal at the source to avoid distortion.



- MIC A input:** connect a microphone here: the euroblock accepts balanced microphone or line level signals and RCA accepts line level signals. Set the mic / line switch accordingly. The stereo unbalanced input signals are mono summed and merged with the balanced input into one signal, which is send to all zone outputs. Phantom power (48 V) can be applied to the balanced euroblock by pushing the phantom power switch. The led beneath the switch will be lit when phantom power is present. Adjust the gain control so that the clip led does not light up when the signal is at its highest level. If necessary, activate the vox circuitry by turning the vox level control until you hear an audible "click". Now turn the vox level control up until the vox circuit is activated. The MIC A volume can be set using the front panel level control (2). MIC A can be activated by pressing the MIC A select switch on the front panel (3). The vox circuit, when activated, will attenuate all lower priority sources (MIC B, input 1-4) by 30 dB. MIC A has its own lo and hi tone controls. MIC A input is compatible with the Apart ALINP local input panel that requires phantom voltage.

*Note:When you only use the RCA inputs, keep the mic/line select switch set to "LINE" to improve the output noise.*

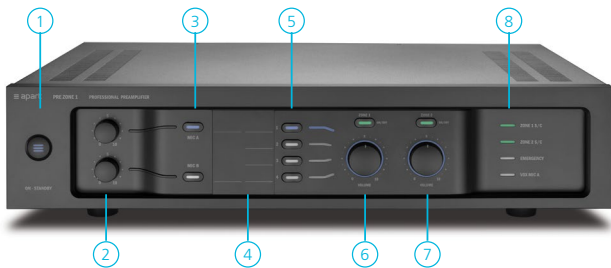
- MIC B input:** connect a microphone here: the euroblock accepts balanced microphone or line level signals and RCA accepts line level signals. Set the mic/line switch accordingly. The stereo unbalanced input signals are mono summed and merged with the balanced input into one signal, which is send to all zone outputs. Phantom power (48 V) can be applied to the balanced euroblock by pushing the phantom power switch. The led beneath the switch will be lit when phantom power is present. Adjust the gain control so that the clip led does not

light up when the signal is at its highest level. MIC B has its own lo and hi tone controls. MIC B input is compatible with the Apart ALINP local input panel that requires phantom voltage.

*Note: When you only use the RCA inputs, keep the mic/line select switch set to "LINE" to improve the output noise.*

4. **Input 1-4:** line level input on RCA connectors. Adjust the gain control so that the clip led does not light up when the signal is at its highest level.
5. **Zone 1 EQ:** lo and hi tone controls for the selected line input 1-4 being fed to zone 1 output.
6. **Zone 1 out:**
  - a. Mono/stereo switch: With this switch the output can be configured as a mono output or stereo output.
  - b. Balanced / RCA outputs: Balanced and RCA output supply a line level output signal.
7. **Zone 2 EQ:** lo and hi tone controls for the selected line input 1-4 being fed to zone 2 output.
8. **Zone 2 out:**
  - a. Mono/stereo switch: with this switch the output can be configured as a mono output or stereo output.
  - b. Balanced / RCA outputs: balanced and RCA output supply a line level output signal.
9. **Main power input, switch and fuse:** connect the mains power cord here. Switch on the power switch to power up the unit. The mains fuse is also located here.

## Operation



1. **On/Standby button and led:** switch the standby ON/OFF with this button. Please note that the main power switch at the rear of the unit must be switched on. Read more about the standby below. When the unit is on, the on/standby button led will light up steadily. When the unit is in standby, the led will fade in/ fade out.
2. **MIC A/B volume control:** this control determines the output volume of MIC A/B for both zones.
3. **MIC A/B on/off switch:** use this button to turn MIC A/B on and off for both zones.
4. **Name field:** here you can attach the name stickers and the name fields supplied with the unit.
5. **Input 1 – 4 selection buttons:** by pressing these buttons, you can toggle between inputs 1 to 4, or switch off the selected input by pressing the button that is lit. You can only select one input at a time for both zones.
6. **Zone 1 on/off button and volume control:** By pressing the on/off button, the zone can be enabled (green) or disabled (red). While the zone is muted, the selected inputs will be muted in these zones.

When the emergency is activated, the output will be automatically unmuted for the duration emergency is active. Turn the volume control clockwise to increase the volume of zone 1, counter clockwise to decrease. The volume control sets the output volume of the selected input 1-4 for zone 1 only.

- 7. Zone 2 on/off button and volume control:** By pressing the on/off button, the zone can be enabled (green) or disabled (red). While the zone is muted, the selected inputs will be muted in these zones. When the emergency is activated, the output will be automatically unmuted for the duration emergency is active. Turn the volume control clockwise to increase the volume of zone 2, counter clockwise to decrease. The volume control sets the output volume of the selected input 1-4 for zone 2 only.
- 8. Status leds:** S/C or signal/clip leds lights up green when an output signal is present and turns red when the amplifier is clipping in the zone output. Emergency led will light up to indicate that an emergency message is coming through (mute all contact or vox). Vox MIC will light up to indicate that the vox circuit of MIC A is active. The vox circuit will not be active when MIC A isn't lit.

## Standby

The On / Standby knob led will slowly fade in/out to indicate that standby is activated.

### **The unit will wake up from standby when:**

- Pressing the standby/power button
- Activating the emergency input by making a connection to the emergency mute all input or vox circuit
- Cycling the power using the rear power switch (or a mains power interruption)
- Pushing any front button

## Technical specifications

Product name	PREZONE1
<b>Emergency</b>	
Nominal input sensitivity	0 dBV (1 Vrms)
SNR (Volume max) (nominal output (0dBV), a-weighted, 20Hz-20kHz)	102 dB
THD+N @ nominal output -6 dB	< 0.7%
Frequency response (-3dB)	300 Hz – 20 kHz
Input impedance	5 kohms
<b>MIC A / MIC B</b>	
Nominal input sensitivity balanced input Mic selected (front volume max)	-47dBV to -19 dBV
SNR @ balanced input, mic selected (Gain max)(nominal output (0dBV), a-weighted, 20Hz-20kHz)	81 dB
Nominal input sensitivity balanced input Line selected (front volume max)	-17 dBV to +11 dBV
SNR @ balanced input, line selected (Gain max)(nominal output (0dBV), a-weighted, 20Hz-20kHz)	89 dB
Nominal input sensitivity RCA input 1 Input only (front volume max)	-17 dBV to +11 dBV
Nominal input sensitivity RCA input Both inputs used (front volume max)	-22 dBV to +6 dBV
SNR @ RCA input (gain max) (nominal output (0dBV), a-weighted, 20Hz-20kHz)	89 dB
Frequency response (-3 dB)	Balanced mic: 190 Hz – 20 kHz RCA/Balanced Line: 20 Hz – 20 kHz
THD+N @ nominal output -6 dB	<0.2 %
LO EQ	+9 dB @ 100 Hz
HI EQ	+/- 8.5 dB @ 10 kHz

Phantom	Voltage: 48V
Vox attenuation MIC B, input 1-4	30 dB
Input impedance Balanced	2K
Input impedance RCA	10K
<b>Input 1-4</b>	
Nominal input sensitivity RCA (0 dBV output)	-17 dBV to +11 dBV
SNR @ RCA input (Gain max) (nominal output (0dBV), a-weighted, 20Hz-20kHz)	97 dB
Crosstalk, L vs R (1kHz, nominal output (0dBV), 20Hz-20kHz)	-80 dB
THD+N @ nominal output -6 dB	<0.2%
Frequency response (-3 dB)	20 Hz – 20 kHz
LO EQ	+9 dB @ 100 Hz
HI EQ	+8.5 dB @ 10 kHz
Input impedance	10K
<b>Power supply</b>	
Max power consumption	30 W
Idle power consumption	10 W
Standby power consumption	<1.8 W
Power supply	100-240 VAC / 50-60 Hz / 30 W
<b>General</b>	
Dimensions amplifier (l x d x h)	430 x 290 x 89 mm
Weight	3.65 kg
accessories	Rack ears, power cable, euroblock connectors, sticker paper, feet, safety document

The warranty of this product and the applicable terms and conditions are provided by the dealer where you purchased this product.

