

# Combo 130

# 1 - Safety information

## Important safety information



This unit is intended for indoor use only. Do not use it in a wet, or extremely cold/hot locations. Failure to follow these safety instructions could result in fire, electric shock, injury, or damage to this product or other property.



Any maintenance procedure must be performed by a CONTEST authorised technical service. Basic cleaning operations must thoroughly follow our safety instructions.



This product contains non-isolated electrical components. Do not undertake any maintenance operation when it is switched on as it may result in electric shock.

## Symbols used



This symbol signals an important safety precaution.



The WARNING symbol signals a risk to the user's physical integrity. The product may also be damaged.



The CAUTION symbol signals a risk of product deterioration.

## Instructions and recommendations

### 1 - Please read carefully :

We strongly recommend to read carefully and understand the safety instructions before attempting to operate this unit.

### 2 - Please keep this manual :

We strongly recommend to keep this manual with the unit for future reference.

### 3 - Operate carefully this product :

We strongly recommend to take into consideration every safety instruction.

### 4 - Follow the instructions:

Please carefully follow each safety instruction to avoid any physical harm or property damage.

### 5 - Avoid water and wet locations :

Do not use this product in rain, or near washbasins or other wet locations.

### 6 - Installation :

We strongly encourage you to only use a fixation system or support recommended by the manufacturer or supplied with this product. Carefully follow the installation instructions and use the adequate tools.

Always ensure this unit is firmly fixed to avoid vibration and slipping while operating as it may result in physical injury.

### 7 - Ceiling or wall installation :

Please contact your local dealer before attempting any ceiling or wall installation.

### 8 - Ventilation :

The cooling vents ensure a safe use of this product, and avoid any overheating risk. Do not obstruct or cover these vents as it may result in overheating and potential physical injury or product damage. This product should never be operated in a closed non-ventilated area such as a flight case or a rack, unless cooling vents are provided for the purpose .

### 9 - Heat exposure :

Sustained contact or proximity with warm surfaces may cause overheating and product damages. Please keep this product away from any heat source such as a heaters, amplifiers, hot plates, etc...

**CAUTION**  
RISK OF ELECTRIC SHOCK  
DO NOT OPEN

**WARNING :** This unit contains no user-serviceable parts. Do not open the housing or attempt any maintenance by yourself. In the unlikely even your unit may require service, please contact your nearest dealer.  
In order to avoid any electrical malfunction, please do not use any multi-socket, power cord extension or connecting system without making sure they are perfectly isolated and present no defect.

**Sound levels**

Our audio solutions deliver important sound pressure levels (SPL) that can be harmful to human health when exposed during long periods. Please do not stay in close proximity of operating speakers.

**Recycling your device**

- As HITMUSIC is really involved in the environmental cause, we only commercialise clean, ROHS compliant products.
- When this product reaches its end of life, take it to a collection point designated by local authorities. The separate collection and recycling of your product at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.

### 10 - Electric power supply :

This product can only be operated according to a very specific voltage. These information are specified on the label located at the rear of the product.

### 11 - Power cords protection:

Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at lugs, convenience receptacles and the point where they exit from the fixture.

### 12 - Cleaning precautions :

Unplug the product before attempting any cleaning operation. This product should be cleaned only with accessories recommended by the manufacturer. Use a damp cloth to clean the surface. Do not wash this product.

### 13 - Long periods of non use :

Disconnect the unit's main power during long periods of non use.

### 14 - Liquids or objects penetration :

Do not let any object penetrate this product as it may result in electric shock or fire. Never spill any liquid on this product as it may infiltrate the electronic components and result in electric shock or fire.

### 15 - This product should be serviced when :

Please contact the qualified service personnel if :

- The power cord or the plug has been damaged.
- Objects have fallen or liquid has been spilled into the appliance.
- The appliance has been exposed to rain or water.
- The product does not appear to operate normally.
- The product has been damaged.

### 16 - Inspection/maintenance :

Please do not attempt any inspection or maintenance by yourself. Refer all servicing to qualified personnel.

### 17 - Operating environment :

Ambient temperature and humidity: +5 - +35°C, relative humidity must be less than 85% (when cooling vents are not obstructed).  
Do not operate this product in a non-ventilated, very humid or warm place.

## 1 - Introduction

Thank you for purchasing an Audiophony® product.

You are now in possession of a high-quality device which will bring you satisfaction.

The Combo was inspired by the many years of experience of the Audiophony® brand.

This user guide will allow you to understand and use all of its functions.

Please keep it within reach during the first uses in order to get familiar with the unit.

## 2 - Main characteristics

### **Amplifier:**

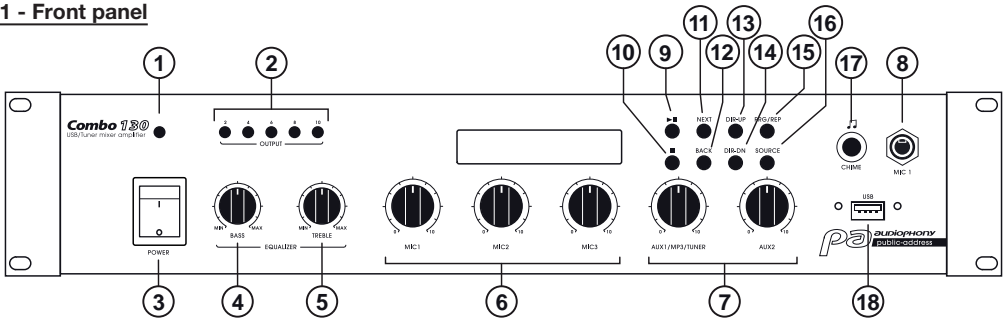
- 3 microphones input with gain control
- 2 line auxiliary inputs with gain control
- 1 pre-amplified output
- Output levels : 100V, 70V at 4 and 16 Ohms
- Talkover/mute function with Mic 1 priority
- Chime talkover
- Visualise the output volume via 5 LED indicators
- Short-circuit protected

### **Multimedia module (included)**

- MP3 player via CUSB key
  - AM/FM tuner with frequency memory
  - LCD display
- 
- Mount-rackable: 19" (2 units)

## 4 - Description

### 4.1 - Front panel



**[1] Power LED**

Indicates if the unit is ON or OFF.

**[2] Volume output indicators**

These LEDs light up to indicate the volume output. This level is indicated from 0 (all LEDs off) to 10 (all LEDs on).

**[3] ON/OFF Power switch**

This switch allows you to turn ON/OFF the unit. This must be done when the input level is at 0 to avoid any damage to the speakers.

**[4] Bass control fader**

Modify the bass level: +/-10dB.

**[5] Treble control fader**

Modify the treble level: +/-10dB.

**[6] Mic gain control faders**

Configures the input level of microphones 1, 2 and 3.

**[7] AUX1 and AUX2 gain control fader**

Configures the input level of AUX1 and AUX2.

**Caution:** AUX1 includes several sources:

- The AUX1
- The built-in tuner
- The built-in USB player

**[8] Mic 1 input**

The MIC1 input is an unbalanced Jack 6.35 socket allowing you to connect a microphone. This is a priority input.

**[9] Play/Pause button**

**USB source:** Plays/pause the current track.

**Tuner:** No function.

**[10] STOP button**

**USB source:** Allows you to stop the current track and go back to the main folder of your USB key.

**Tuner:** No function.

**[11] NEXT button**

**USB source:** Skips to the next track.

**Tuner:** Use this button to browse through the channels memorised by the tuner.

**[12] BACK button**

**USB source:** Goes back to the previous track.

**Tuner:** Use this button to browse through the channels memorised by the tuner.

**[13] DIR-UP button**

**USB source:** Skips to the next folder.

**Tuner:** Use this button to browse through the tuner receiving channels.

**[14] DIR-DOWN button**

**USB source:** Goes back to the previous folder.

**Tuner:** Use this button to browse through the tuner receiving channels.

**[15] PRG/REP button**

**USB Source:** No function

**Tuner:** Allows you to save a frequency into the selected channel memory.

**[16] Source button**

Allows you to select the AUX1 source: FM, AM, USB or AUX1.

**[17] CHIME button**

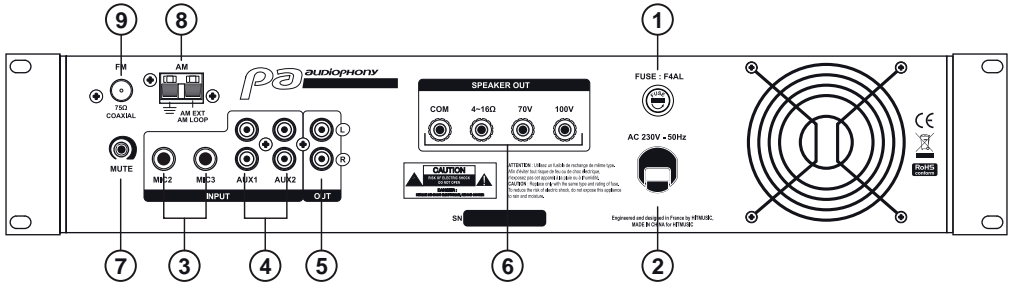
Activates the chime.

There are 4 tonalities available by pressing this button several times.

**[18] USB port**

Connect a USB key or HDD to this port.

4.4 - Rear panel



- [1] Fuse**  
If need to change the fuse, please replace it by a model with the exact same characteristics.
- [2] Power cord**  
Connect this cable to a standard electrical outlet (16 A - 230 V).
- [3] Mic 2 and 3 inputs**  
These unbalanced Jack 6.35 inputs allow you to use dynamic microphones. The volume can be controlled via the front panel.
- [4] Aux 1 and 2 inputs**  
These RCA unbalanced stereo inputs allow you to connect line-level -10 dB sources.
- [5] Line-level output**  
This RCA unbalanced output allows you to connect sound diffusion or recording systems. The output level is -10 dB.
- [6] Loudspeakers output terminal**  
Connect here your sound system, depending on its type. The black terminal represents the com. The red terminal must be used according to your sound system:
  - 4 to 16 Ohms for a speaker set with a total impedance included between 4 and 16 Ohms
  - 70 V for a PA system of 70V (max 130 W)
  - 110 V for a PA system of 70V (max 130 W)
- [7] Mute button**  
Allows you to configure the mute level. The max value is -30 dB.
- [8] AM antenna**  
Connect your AM antenna here. The system cannot detect any signal without antenna.
- [9] FM antenna**  
Connect your FM antenna here. The system cannot detect any signal without antenna.



**Warning: Dangerous output voltage (100V).**  
Please only use cables compliant with the current laws and safety regulations.

### 4.3 - Functions and additional information

#### **MUTE**

The Mic 1 and the chime feature a priority function. Other sources will be dimmed while using the priority channels. The MUTE mode can be adjusted with the MUTE button located on the rear panel. The default parameter is -30dB.

#### **Connecting a USB key**

Connect your USB key before turning on the COMBO130. The default mp3 mode is "full loop", the unit will read all the tracks contained in a loop. Only use compatible formats: the key or HDD must be FAT-formatted, with a maximum of 500 Gb. Moreover, the player can read files up to 48 kHz. The sampling rate is limited to 320 kbs. We strongly advise against using devices containing other types of files (images, videos, etc).

#### **Chime**

The chime features 4 different tonalities. The chime benefits from the priority function.

#### **USB folder tree**

The USB key player can read up to 99 folders max. Each folder can contain up to 999 files. Beyond these limits, the player will not detect tracks. Moreover the tree folder cannot include more than 8 layers, including the root directory.

### 4.4 - Output terminal

The output terminal is located at the rear and can be used to plug Banana connectors or bare wires. The black socket is the com while the red sockets are the positive (the choice depends on the voltage).

Please only use loudspeakers whose transformers have a total power lower than the power of the amplifier.

If using a loudspeaker system between 4 and 16 Ohms, use the corresponding 4-16 Ohms output. In this case, the total power of the speakers must be closed to the total power of the amplifier (+/-10%). The impedance must not be lower than 4 Ohms or high than 16 Ohms in order to prevent any damage to the amplifier.

**5 - Cable diameter depending on the installation:**



**WARNING :**  
**The SPEAKER OUTPUT delivers a dangerous voltage of 100 V**  
**Please turn your system off when changing cables.**



You will find below an indicative table of the cable diameter to use depending on the power and distance:

Amplifier power:	100V	0,75mm <sup>2</sup>	1,0mm <sup>2</sup>	1,5mm <sup>2</sup>	2,5mm <sup>2</sup>	4,0mm <sup>2</sup>
30W		800m	1000m	1600m	2600m	4200m
60W		400m	500m	800m	1300m	2100m
120W		200m	250m	400m	600m	1000m
240W		100m	130m	200m	300m	500m

The speakers should always be wired in parallel and the sum of the speakers power must never exceed the nominal power, failing which severe damages to the amplifiers may occur.

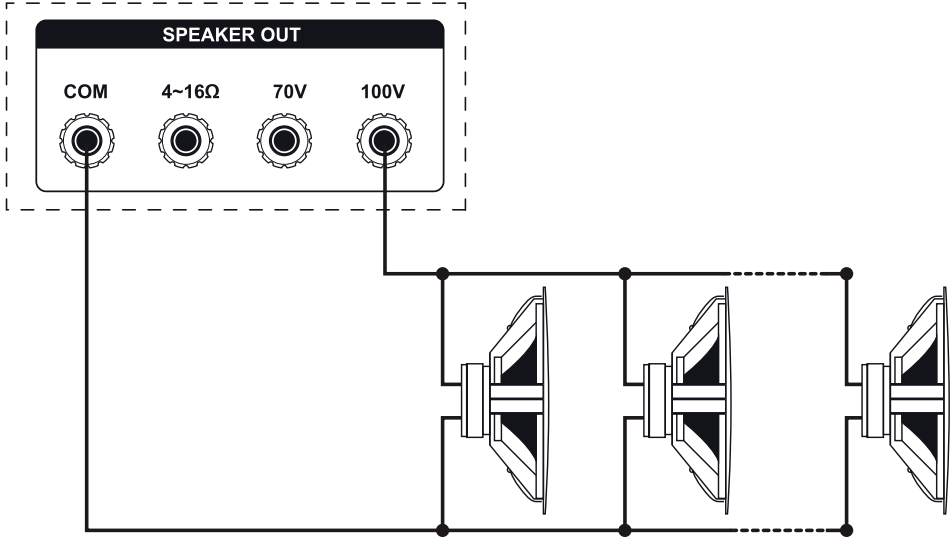
Please use cables compliant with the current electrical standards and safety regulations.

## 6 - Wiring a 100V line:

### Wiring the speakers:

The COM terminal regroups the connectors of each zone.  
 The speakers can be wired in parallel.  
 The sum of the speakers must not exceed the power of the amplifier.

The drawing below is an exemple of wiring across 3 zones.





## 7 - Technical specifications

- **Power:**
  - 130W
- **Loudspeakers output:**
  - 70 V(38 Ohms) DC
  - 100 V (77 Ohms) DC
  - 4 to 16 Ohms
- **Inputs :**
  - MIC1 : 600 Ohms 5-8 mV, Unbalanced
  - MIC2 : 600 Ohms 5-8 mV, Unbalanced
  - MIC3 : 600 Ohms 5-8 mV, Unbalanced
  - AUX1 : 10k Ohms 150-470 mV, Line level and unbalanced
  - AUX2 : 10k Ohms 150-470 mV, Line level and unbalanced
- **Auxiliary output:**
  - 0,775V (0 dB) line level
- **Frequency response:**
  - 60 Hz - 15 KHz ( -/+ 3dB)
- **THD :**
  - <1% at 1 KHz, 1/3 of the max. power
  - <2%, at full power
- **Signal-to-noise ratio:**
  - Line : >85 dB
  - MIC : >72 dB
- **Amplifier settings range:**
  - BASS : 100 Hz (-/+10dB)
  - TREBLE : 12 KHz (-/+10dB)
- **Cooling system:**
  - Via regulated fan
- **Protection:**
  - AC X 4A Fuse
  - AC X 1 Fuse, Over-voltage, short-circuit, high temperature
- **FM characteristics**
  - Frequency range: 87,00MHz - 108,00MHz
  - Frequency hopping: 10 KHz
  - Operating temperatures: -5°C- +70°C
  - Antenna : 75 Ohms unbalanced
- **AM characteristics**
  - Frequency range: 522 KHz - 1611 KHz
  - Frequency hopping: 9/10 KHz
- **Additional characteristics:**
  - Dimensions: 483(W) x 89(H) x 366(D) mm
  - Net weight : 11.36 Kg
  - Power supply: 220V 50-60 Hz
  - Power consumption : 175W

Because AUDIOPHONY® takes the utmost care in its products to make sure you only get the best possible quality, our products are subjects to modifications without prior notice. That is why technical specifications and the products physical configuration might differ from the illustrations.  
Make sure you get the latest news and updates about the AUDIOPHONY® products on [www.audiophony.com](http://www.audiophony.com)  
AUDIOPHONY® is a trademark of HITMUSIC S.A. - Zone Cahors sud - 46230 FONTANES - FRANCE