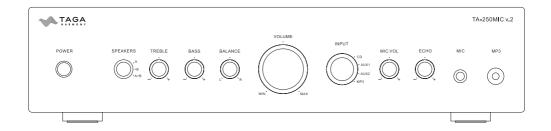


# TA-250MIC v.2

#### CUSTOM INSTALL A/B SPEAKER STEREO AMPLIFIER



Instruction manual

### Introduction

Thank you for purchasing this TAGA Harmony amplifier.

TA-250MIC v.2 is an efficient, cost-effective choice for home hi-fi systems and commercial installations in restaurants, pubs, shops, conferencing rooms, fitness clubs for both background music, voice playback or karaoke systems.

TA-250MIC v.2 integrated amplifier offers the finest music performance at this price level and perfect matching with most speakers available on the market. It utilizes advanced materials, state of the art engineering and innovate design by an international team of professional designers.

It delivers pure and distortion-limited power as well as rich sound performance with stunning accuracy, soundstage and sensational dynamics.

<u>A variety of features and wired connections makes the TA-250MIC v.2 a very versatile device with ability to work in different applications:</u>

- Built-in microphone input with a mixing and echo control is a perfect solution for voice playback.
- MP3 3.5 mm (1/8") stereo input on the front panel to quickly connect a laptop, smartphone or tablet.
- Three **RCA stereo inputs** at the rear to hook additional equipment like a CD player, radio tuner or other analog devices.
- Two **speaker outputs (A and B)** to build a simple and cost-effective two-zone sound system.

#### Cleaning

Do not use strong or abrasive cleaners. Use a damp, soft cloth for cleaning.

#### Specifications and the latest instruction manual edition

Full technical specifications and the latest edition of the instruction manual are available on **www.TagaHarmony.com**.

## Contents

Contents	
Safety Instructions	4
Front and Rear Panel	6
Hooking Up Speaker Cables	7
Hooking Up the Amplifier	8
Operation	10
Additional Information	12
Specifications	13

#### IMPORTANT

#### **READ THIS SECTION CAREFULLY BEFORE PROCEEDING!**



# CAUTION

#### RISK OF ELECTRIC SHOCK DO NOT OPEN

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE. DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The triangle containing a lightning symbol is intended to alert the user to the presence of uninsulated dangerous voltages within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



An exclamation mark in a triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

**WARNING:** TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE, AND OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHOULD NOT BE PLACED ON THIS APPARATUS.

**CAUTION:** TO PREVENT ELECTRIC SHOCK, FULLY AND SECURELY INSERT THE POWER CABLE PLUG INTO THE POWER OUTLET, AND POWER CABLE CONNECTOR INTO THE UNIT SOCKET (IF THIS UNIT IS NOT EQUIPPED WITH AN INTEGRATED [ATTACHED] POWER CORD).

**CAUTION:** FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE THE FUSE (IF THE UNIT IS EQUIPPED WITH A USER REPLACEABLE FUSE) ONLY WITH THE SAME AMPERAGE AND VOLTAGE TYPE. IN CASE WHEN THE UNIT IS NOT EQUIPPED WITH A USER REPLACEABLE FUSE - REFER REPLACEMENT TO QUALIFIED SERVICE PERSONNEL.

**WARNING:** THE UNIT MAY BECOME HOT. ALWAYS PROVIDE ADEQUATE VENTILATION TO ALLOW FOR COOLING. DO NOT PLACE THE UNIT NEAR A HEAT SOURCE, OR IN SPACES THAT CAN RESTRICT VENTILATION.

### **Safety Instructions**

- 1. Read Instructions All the safety and operating instructions should be read before the product is operated.
- Retain Instructions The safety and operating instructions should be retained for future reference.
- Heed Warnings All warnings on the product and in the operating instructions should be adhered to.
- Follow Instructions All operating and use instructions should be followed.
- Cleaning Unplug this product from the power outlet before cleaning. Do not use liquid cleaners or aerosol cleaners.
- 6. Water and Moisture Do not use this product near water for example, near a bath tub, wash bowl, kitchen sink or laundry tub; in a wet basement; or near a swimming pool; and the like. These precautions also apply to the power cord.
- 7. Accessories Do not place this product on an unstable cart, stand, tripod, bracket or table. The product may fall, causing serious injury to a child or adult and serious damage to the product. Use only with a cart, stand, tripod, bracket or table recommended by the manufacturer or sold with the product. Any mounting of the product should follow manufacturer's instructions and should use a mounting accessory recommended by the manufacturer.
- 8. Ventilation This unit may be equipped with slots and openings in the cabinet (housing) which are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug or other similar surface. This product should be not placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to. For products equipped with a separate power supply unit, leave at least 5cm (2in.) of free space on all sides and the top of the power supply.
- 9. Power Sources This product should be operated only from the type of power source indicated on the marking label (placed on the product and/or, if applicable, on a separate power supply unit). If you are not sure of the type of power supply in your home, consult your product dealer or local power company. For products intended to operate from battery power or other sources, refer to the operating instructions.
- Grounding and Polarity some units for proper operation or to take full advantage of their capabilities may require to be connected to a grounded power outlet - refer to the user manual for more information.

Some units may have markings for the live (L) and neutral (N) conductors for power - in order to take full advantage of capabilities of such products, it is recommended to properly connect the polarity according to the markings on the unit - refer to the user manual for more information. Connecting the polarity not in accordance with the markings will not affect the durability and reliability of the device.

- Power-cord Protection Power supply cords should be routed so that the are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles and the point where they exit from the product.
- 12. Lighting For added protection for this product during a lighting storm or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or system cables. This will prevent damage to the product due to lighting and power-line surges.

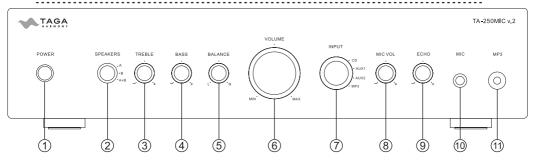
- Overloading Do not overload wall outlets, extension cords or integral convenience receptacles as this can result in a risk of fire or electric shock.
- 14. Object and Liquid Entry Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Do not expose this apparatus to dripping or splashing and ensure that no objects filled with water, such as vases are placed on the apparatus.
- Servicing Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
- Damage Requiring Service Unplug this product from wall outlet and refer servicing to qualified personnel under the following conditions:
- · when power supply cord or plug is damaged;
- · if liquid has been spilled or objects have fallen into the product;
- if the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will require extensive work by a qualified technician to restore the product to its normal operation;
- if the product has been dropped or damaged in any way;
- if the product exhibits a distinct change in performance this indicates a need for a service.
- Replacement Parts when replacement parts are required, be sure the technician has used replacement parts specified by the manufacturer or with the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.
- Safety Check Upon completion of any service or repairs to this product, ask the service technician to perform safety check to determine that the products is in proper operating condition.
- Wall of ceiling mounting The product should be mounted to a wall or ceiling only as recommended by the manufacturer.
- Heat The product should be situated away from heat sources such as radiators, heat registers, stoves or other products (including amplifiers) that produce heat.
- [Refer to products equipped with vacuum tubes] Tube Cage or cover - For your safety and to protect the vacuum tubes this product may be equipped with the factory installed vacuum tube cage or cover.

It is not recommended to remove the cage or cover unless it is required to change the vacuum tubes.

When the cage or cover is removed - do not touch the vacuum tubes - they may be hot and burn the skin!

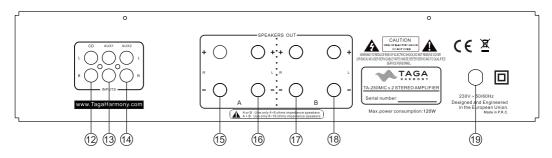
 Operating Environment - Operating environment temperature and humidity of the unit: +5°C to +35°C (+41°F to +95°F); less than 85% RH (cooling slots not blocked).

### Front and Rear Panel



#### **Front Panel**

- 1. Power Switch (ON and OFF) and Power Status Indicator (around the Power Switch)
- 2. Speaker Selector (A, B, A+B)
- 3. Treble Regulator
- 4. Bass Regulator
- 5. Balance Regulator
- 6. Volume Regulator
- 7. Input Selector (CD, AUX1, AUX2, MP3)
- 8. Microphone Level Regulator
- 9. Microphone Echo Regulator
- 10. Microphone 6.35 mm (1/4") Input
- 11. MP3 3.5 mm (1/8") Stereo Input



#### **Rear Panel**

- 12. CD Stereo RCA Input
- 13. AUX1 Stereo RCA Input
- 14. AUX2 Stereo RCA Input
- 15. Speaker Group A Right Channel Output (Speaker Connectors)
- 16. Speaker Group A Left Channel Output (Speaker Connectors)
- 17. Speaker Group B Right Channel Output (Speaker Connectors)
- 18. Speaker Group B Left Channel Output (Speaker Connectors)
- 19. Power Cable

# Hooking Up Speaker Cables

The Speaker Connectors can accommodate up to 10AWG speaker cables as well as most of popular plugs (banana etc.). It is recommended to leave about 150 cm (5 feet) of extra cable at the amplifier end to facilitate positioning and installation of the amplifier. Do not use staples, nails or other metal objects to secure the cables. You will get the best sound quality and least amount of hum by keeping the cables away from other electrical wires and cables.

Pay attention to connecting the polarity of the amplifier correctly with the speakers in each speaker group (speakers should be connected RED + with RED + amplifier connector, BLACK – with BLACK – amplifier connector).



Before connecting make sure that your amplifier is turned off. Do not let bare speaker wires touch each other or any metal part of this unit it can damage this amplifier and/or speakers. This may void your warranty.

Please refer to your speaker instruction manual for more information.

#### **Connecting speaker cables**

Speaker cables have 2 conductors. Each conductors should be connected to a separate speaker connector - mind the polarity while connecting. For each conductor:

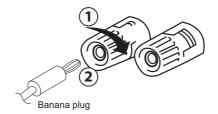
- 1. Remove approximately 10 mm (3/8") of insulation from the end of the conductor. Twist the bare wires firmly together.
- 2. Loosen the speaker connector.
- 3. Insert the bare wires of the conductor into the gap of the speaker connector.
- 4. Tighten the speaker connector.

#### Connecting via banana plug

Mind the polarity while connecting.

**Note!** An insert hole for the banana plug in some speaker connectors maybe secured with a plastic plug - make sure to remove this plastic plug before inserting the banana plug.

- 1. Tighten the speaker connector.
- 2. Insert the banana plug into the end of the corresponding connector.

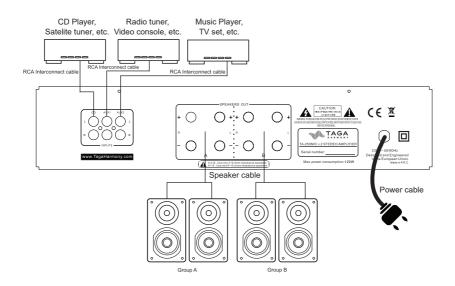




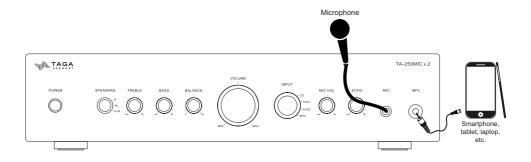
10 mm

(3/8'')

# Hooking Up the Amplifier



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# Hooking Up the Amplifier

- 1. Make sure the amplifier is turned off (the Power Switch OFF and the Power Cable is removed from the wall outlet).
- 2. Turn the Volume Regulator to MIN (max counter clockwise).
- 3. Using speaker cables (not supplied with this product) connect your speakers to the SPEAKERS OUT (A or B, A and B) connectors located on the rear panel. Check "Hooking Up Speaker Cables" for more details.
- 4. If you want to play music from analog audio source devices (CD player, satellite or FM tuner, video console etc.): using RCA interconnect cables (not supplied with this product) connect them to the analog inputs on the rear panel (CD, AUX1, AUX2).
- 5. If you want to play music from an analog audio source device (smartphone, computer etc.): using a 3.5 mm (1/8") mini jack interconnect cable (not supplied with this product) connect it to the analog 3.5 mm (1/8") input on the front panel (MP3).
- 6. If you want to use a microphone: using a 6.35 mm (1/4") jack interconnect cable (not supplied with this product) connect it to the Microphone 6.35 mm (1/4") input on the front panel (MIC).
- 7. Your amplifier is ready for operation.



Depending on the speaker configuration (A or B, A + B) only speakers within the below range of impedance may be connected to this amplifier. Connecting speakers outside this range may damage this amplifier and/ or speakers. This may void your warranty. A or B : use only 4 -  $8\Omega$  impedance speakers

A of B : use only 4 -  $6\Omega$  impedance speakers A + B : use only 8 -  $16\Omega$  impedance speakers

# Operation

- 1. Plug the Power Cable into the electrical outlet.
- Turn on the amplifier press the Power Switch (the Power Switch III ON ). The Power Status Indicator around the Power Switch should turn on in a few seconds.

If it does not, it means that the amplifier is working under an abnormal condition (a protection mode) – turn off the power, unplug the Power Cable and check whether some of the cables are not short circuited. After fixing the cables turn the amplifier on.

3. Using the Speaker Selector knob select which group of speakers (A or B or A+B) you want to use.

If you want to use 2 pairs of speakers choose the A+B option.

- Using the Input Selector knob select which audio source you want to play (corresponding to the selected input). Make sure the audio source is properly connected to the front and rear panel inputs.
- 5. Turn on your audio source and start playback.
- 6. Regulate volume on the amplifier to adjust the level of sound.

Note! Check "Additional Information" for other useful operating instructions.



High volume levels may damage this amplifier and/or speakers. This may void your warranty.

#### VOLUME regulator:

Using the Volume Regulator on the front panel, you can adjust the sound volume from minimum (the knob – max counterclockwise) to maximum (the knob – max clockwise).



Distortion and sound quality worsening may occur when the knob is in the maximum position. It may damage the amplifier and/or speakers. This may void your warranty.

#### **TREBLE regulator:**

You can adjust treble output of the amplifier. The default: the knob is in the center position : the marker on the knob in the vertical position.

Turn the knob counterclockwise (-) to decrease the amount of high frequencies. Turn the knob clockwise to increase the amount of high frequencies (+).

#### **BASS regulator:**

You can adjust bass output of the amplifier. The default: the knob is in the center position : the marker on the knob in the vertical position.

Turn the knob counterclockwise (-) to decrease the amount of low frequencies. Turn the knob clockwise (+) to increase the amount of low frequencies (+).



Using the BASS / TREBLE regulators at high volume levels may damage this amplifier and/or speakers. This may void your warranty.

### Operation

#### BALANCE regulator:

You can adjust the balance of the volume output from the left and right speakers. Turn the knob towards the speaker (channel) which you want the volume output to be higher than in the other speaker (channel).

The default: the knob is in the center position: the marker on the knob in the verticalposition.

#### Microphone:

This amplifier allows a connection of a wired microphone (not supplied with this product) and voice mixing with the background music.

#### MIC VOL - microphone level regulator:

You can adjust the sound level of the microphone relative to the currently played background music.

To make the microphone sound more audible turn the MIC VOL knob clockwise (+) and to make it less audible rotate the knob counterclockwise (-).

The master volume level for both the microphone and background music is regulated by the Volume Regulator.

The MIC VOL control is also active without the background music (only microphone is working).

The default: the knob is in the center position: the marker on the knob in the vertical position.

#### ECHO - microphone echo regulator:

You can adjust the level of reverberation of the microphone.

To increase the reverberation turn the ECHO knob clockwise (+) and to decrease it rotate the knob counterclockwise (-).

The default: the knob is in the center position: the marker on the knob in the vertical position.



Using the microphone at high volume levels may damage this amplifier and/or speakers. This may void your warranty.

### Additional Information

#### Break-In

Your TAGA Harmony amplifier sounds great immediately after it is taken out of the carton but as in all amplifiers, the internal components of this amplifier require a "break-in" period to reach its full sonic capabilities.

During the "break-in" period it is recommended to operate the amplifier at moderate volume levels.

The first level of the "break-in" is reached after approximately 10 hours of play. The optimal level of the "break-in" is reached after approximately 40 to 60 hours of play.

#### Turn off procedure

Make sure to turn off the amplifier first when powering down your system.



If the amplifier was turned off even for a short period of time, you should wait at least 2 minutes before turning it back on. Do not turn it ON then OFF and then ON again in quick succession.

Follow this procedure each time you turn your amplifier OFF / ON. This precaution will minimize the stress (high voltages) on internal components.

#### Noise floor

It is a normal phenomenon that an amplifier may produce some amount of noise (called noise floor or self-noise) which can be audible in speakers (in one or both channels).

#### Power transformer – Power filters and conditioners

It is a normal phenomenon that the device's power transformer may generate a certain amount of audible noise.

Very loud operation of the power transformer may be caused by low quality of power supply (voltage surges etc.).

In such a case, we suggest using a power filter or conditioner - you can also try to power this product from a different power line than other devices (e.g. from a power outlet in another room).

# **Specifications**

Туре	Custom Install stereo amplifier Class A/B
Power Output	2 x 50W RMS 4Ω 2 x 40W RMS 8Ω
THD	≤ 2% (30 - 20kHz)
Signal/Noise ratio	=>80dB (A-weighted): line inputs =>70dB (A-weighted): mic inputs
Frequency Response	30Hz – 20kHz (+/-3dB)
Inputs	RCA stereo CD / AUX1 / AUX2, 3.5mm stereo MP3, 1/4" MIC input
Microphone Input	Sensitivity 10mV; THD 2%; Frequency resp. 200HZ ~ 12KHz (+/-3dB)
AC Power, Power Consumption	220-240V 50/60Hz, 120W
Dimensions (H x W x D)	9.7 x 42.4 x 32.3 cm
Weight (net.)	6.2 kg / pc.

We reserve the right to change the technical data and the design of the product without notice as a result of further development.

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We strongly advise to contact a professional installer or dealer in order to install TAGA Harmony products.

We recommend using high quality TAGA Harmony cables and other installation accessories.

Kit Content:	
Amplifier	1EA
Instruction Manual	1EA





#### **IMPORTANT!**

Your product is marked with the symbol as showed on the left. For EU (European Union) member users:

According to the WEEE (Waste electrical and electronic equipment) Directive, do not dispose of this product as household waste or commercial waste. Waste electrical and electronic equipement should be appropriately collected and recycled as required by practices established for your country. For information on recycling of this product, please contact your local authorities, your household waste disposal service or the shop where you purchased the product.

#### TAGA EUROPE

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### www.TagaHarmony.com

### Notes

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# Notes