

Technical Pro
MINI Amplifier
User Manual for:
MA2020



#### WARNING

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER OF THIS UNIT. THERE ARE NOUSER-SERVICEABLE PARTS INSIDE. REFER ALL SERVICING TO A QUALIFIED TECHNICIAN.



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of "dangerous" voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to humans. Users should exhibit extra safety when this symbol appears in this instruction manual and follow all precautions as they are stated.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in this manual.

- 1- Read these instructions thoroughly before using this item.
- 2- Keep these instructions for future reference.
- 3- Heed all warnings.
- 4- Follow all instructions.
- 5- WARNING: To prevent fire or electric shock, do not expose this equipment to rain or moisture. Do not store or operate this product near any liquids.
- 6- Clean only with a dry cloth.
- 7- Do not store or operate this product near any heat sources such as radiators, heat registers, stoves, or other apparatuses (including amplifiers) that produce heat.
- 8- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding plug has two blades and a round grounding prong. The wide blade or third prong is provided for your safety. If the provided plug does not fit your outlet, consult an electrician for the replacement of the obsolete outlet.
- 9- Protect the all wires connected to this unit from being walked on or pinched, particularly plugs and the point where they exit from the unit. When removing the cord from the power outlet, remove it by holding the plug not by pulling the cord.
- 10- Unplug the unit during lightning storms or when unused for long periods of time.
- 11- When wiring this unit and all other equipment used in connection to this unit make sure that all of your equipment is turned OFF.
- 12- Once installation and wiring is complete power on all your equipment with the volume and level controls turned DOWN. Once all the equipment is ON slowly raise the volume or level controls to their proper positions.
- 13- When grounding this unit, be sure to do so correctly, so as not to defeat the built-in grounding in this unit.
- 14- Before placing, installing, rigging, or suspending any product, inspect all hardware, suspension, cabinets, transducers, brackets and associated equipment for damage. Any missing, corroded, deformed, or non-load rated component could significantly reduce the strength of the installation, placement or array. Any such condition severely reduces the safety of the installation and should be immediately corrected. Use only hardware which is rated for the loading conditions of the installation and any possible short-term, unexpected overloading. Never exceed the rating of the hardware or equipment.
- 15- Consult a licensed, Professional Engineer regarding physical equipment installation. Ensure that all local, state and national regulations regarding the safety and operation of equipment are understood and adhered to.
- 16- Refer all servicing to qualifie nel. 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, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

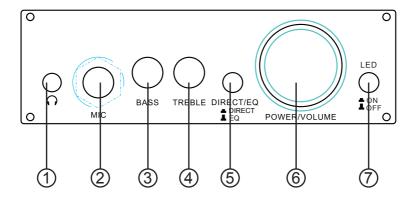
#### Introduction

Congratulations and thank you for your purchase of this Technical Pro Professional MINI amplifier, the MA2020. To get the most from your MA2020, it is recommended that you review all of the information provided in this instruction manual before operating this equipment.

If you've spent any time at all in professional audio, you know the name Technical Pro and what it stands for — incredible performance & sound, and the ultimate in reliability under harsh conditions. And now, Technical Pro offers the same technology in a series of integrated amplifier bringing more of what sets Technical Pro apart from all others.



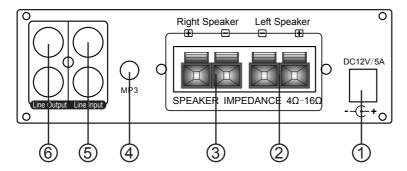
### MA2020 Front Panel



- **1.Headphone Output:** Connect your headphone here. Make sure the volume level of the unit is turned down before making the connection.
- 2.MIC Input: Microphone Input  $\frac{1}{2}$ ". Please note that all the inputs are parallel. All the available sources from different inputs will be mixed and sent to main outputs.
- 3.Bass Control:Use this knob to adjust the bass on the main output.
- **4.Treble Control:** Use this knob to adjust the treble on the main output.
- **5.DIRECT/EQ:** Press this button to bypass the EQ effect on the MA2020 or not. When the direct button is pressed the signal will pass through the MA2020 unaffected. Press again to undo.
- **6.Power/Volume:** Turn this knob clockwise to power on the unit. Keep turning to increase the volume level of main output. Turn this knob counterclockwise to decrease the volume level until the unit is powered off.
- **7.LED ON/OFF:** Press this button to turn on the LED surrounding the volume knob. Press again to turn it off.



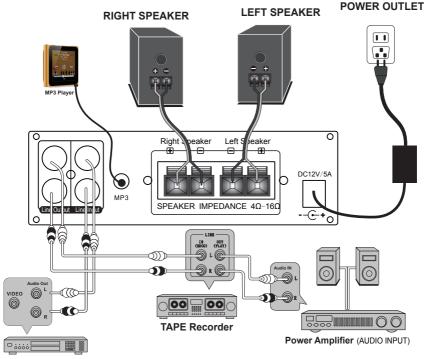
### MA2020 Rear Panel



- **1.Power Supply:** Use the adapter provided to power on the unit. Before connecting it to the outlet, be sure the power of the MA2020 is off.
- **2.Main Left Output:** Connect your left speaker to this speaker output. The MA2020 should be powered off.
- **3.Main Right Output:** Connect your right speaker to this speaker output. The MA2020 should be powered off.
- **4.MP3 Input:** Connect your MP3 player here. *Please note that all the inputs are parallel. All the available sources from different inputs will be mixed and sent to main outputs.*
- **5.LINE** Input: Connect any stereo signal such as a DVD, CD, TAPE, Mixer etc to this input. *Please note that all the inputs are parallel. All the available sources from different inputs will be mixed and sent to main outputs.*
- **6.LINE Output:** Connect the line output to the input on either a recording device or another amplifier. The signal from the line output is a passive output and can not be connected directly to a passive speaker.



### **MA2020 Input and Output Connections**



**DVD Player** (AUDIO OUTPUT)

In the typical setup, a user should wire from the output of the signal source directly the RCA input on the rear of the MA2020. Once the input signal source is connected to the MA2020, connect the loudspeakers to the MA2020's main outputs. Pictured above is a DVD player and a MP3 player connected to the MA2020 inputs. The MA2020 has two loudspeakers connected to it which will play all the available sources from different inputs.

The LINE OUTPUT is connected to the input of a tape recorder. The output of the tape recorder is connected to the input of another amplifier. You can bypass the tape recorder and connect the LINE OUTPUT directly to the input of another amplifier. The LINE OUTPUT will send the signal to the input of that amplifier.

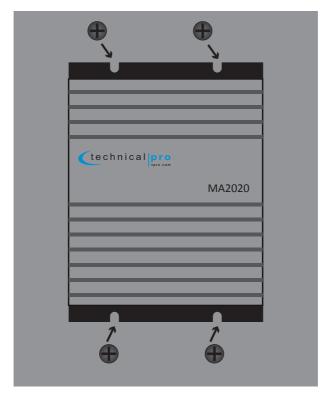
NOTE:WHEN MAKING THESE CONNECTIONS THE POWER OF THE MA2020 AND THE SIGNAL SOURCE SHOULD ALL BE IN THE OFF POSITION WITH THE VOLUME LEVELS TURNED DOWN



## **MA2020 Mounting Instruction**

There are four pieces screws packed with the accessories. These screws are used to mount the MA2020 onto a surface as below diagram illustrated.

# screws × 4





# Input / Output Connections Connecting the Signal Source to the MA2020 (DVD/MIXER/MP3 etc.)

The MA2020 has one input jack on the rear of the unit which is designed to receive the signal directly from your DVD, mixer or any of your other 2 Channel signal sources. To ensure that you have correctly connected your DVD player (other sound sources) to the unit, make sure that the DVD player has a RCA cord coming from it's output and that this cord is plugging into the RCA Input on the rear of the MA2020. Ensure that the polarity of your signal is always maintained by using color coordinated RCA cables.

NOTE: BE SURE NOT TO CONNECT AN AMPLIFIER OR ANY AMPLIFIED SIGNAL INTO THE RCA INPUT JACK. AS THIS COULD DAMAGE THE MA2020. NO OTHER AMPLIFIER IS NEEDED TO POWER YOUR SIGNAL IN ADDITION TO THE MA2020. ALWAYS MAKE SURE THAT THERE IS ONLY ONE AMPLIFIER IN THE SIGNAL PATH.

There are also input jack for a MP3 player on the front panel of the MA2020. Just plug the MP3 player into the MP3 input jack to play signal from MP3 plaer. Be sure that the volume of your MP3 player and MA2020 are turned down at first and then slowly raise the volume to prevent damaging the speakers or any of your other equipment.

### **Connecting Microphones to MA2020**

There are one ¼" input on the face of the unit which you can plug microphone or line level devices directly into. To use, simply plug the microphone into the ¼" input while the speaker and microphone are in the OFF position. Once plugged in, power on the unit and microphone. Once turned on, simply turn up the Power/Volume (6) to the desired levels.

### Connecting the MA2020 to Passive Loudspeakers

The MA2020 is designed to power up to two full-range passive loudspeakers. The speakers should be connected via the speaker wire outputs on the rear of the MA2020.

NOTE: WHEN MAKING THESE CONNECTIONS THE POWER OF THE MA2020 AND THE SIGNAL SOURCE SHOULD ALL BE IN THE OFF POSITION WITH THE VOLUME LEVELS TURNED DOWN. ONCE THE UNITS ARE ALL POWERED ON, SLOWLY INCREASE THE VOLUME TO AVOID DAMAGING ANY OF YOUR EQUIPMENT. THE MA2020 OPERATED MOST EFFICIENTLY WHEN USED WITH 8 OHM SPEAKERS.

#### Accessories

Adpater, MP3 Cable, Self Adhesive Feet, Screws, User Manual, Warranty.