



MAX-62
100V LINE PROFESSIONAL
P. A. AMPLIFIER

EN Instruction Manual



We take this opportunity to thank you for buying this product.

We recommend you read the instruction manual before switching on the machine and follow the instructions that are given. Keep the manual for future reference.

SECURITY AND THE ENVIRONMENT

ELECTRICAL SECURITY

Check that the current in the mains connection where the machine is to be installed corresponds to the power supply of the machine.

To avoid damaging the equipment, electrical shocks, fire or physical injury when you connect or disconnect the equipment from the power supply, pull the plug firmly out of the mains socket holding the plug, never the cable.

Always do this with dry hands.

Keep the power supply cable far from sources of heat. Do not put heavy objects on top of it or change it.

Clean dust and dirt off the power supply cable regularly.

Do not open the machine; you could get an electric shock.

CAUTION

While installing the machine, make sure it is switched off and unplugged.

Do not open the machine. Touching the internal parts is dangerous and you could receive an electric shock.

The machine must not be splashed or dripped on. Never place recipients with liquid inside on the machine.

Do not place anything inside the machine.

LOCATION

Place the equipment on a horizontal surface with enough space around it to allow ventilation.

Avoid direct sunlight, heat sources and excessive dust.

Do not place the machine near magnetic fields or static electricity.

Do not use surfaces which vibrate or receive impact.

Do not pile machines on top of one another.

VENTILATION

Never block or cover the ventilation slits on the machine.

Do not expose it to direct sunlight or place it near sources of heat.

PERIODS OF INACTIVITY

When the machine is not going to be used for a long period of time, disconnect it from the mains.

If you are using an adapter, take into account that it will continue using electricity even if the machine is switched off. If it is not going to be used for a long period of time, disconnect it from the mains.

THE ENVIRONMENT

To save energy, switch the machine off when you are not going to use it for a long time. The machine could contain substances that are harmful to the environment or human health. To minimize the effect of these substances the machine must be correctly managed and recycled when you decide to dispose of it.

When you dispose of it remember: it cannot be thrown into a conventional rubbish bin.

If it contains or uses batteries, these must be disposed of separately.

The machine (without batteries) must be disposed of correctly. Put it in a container specially intended for the collection of electronic and electrical appliances, at the dump or hand it over to the dealer when you purchase similar equipment, so that the dealer can dispose of it correctly (at no added cost).

SIGNIFICANCE OF THE SYMBOLS ON THE MACHINE*



The symbol formed by the expression “Class 1 laser product” written in a rectangle indicates that visible or invisible laser radiation could be produced. Avoid direct exposure to the laser.



The symbol formed by a ray of lightening inside a triangle shows that the machine has connection terminals or a circuit with areas with a current which could cause an electric shock, even in normal working conditions.



The symbol formed by an exclamation mark in a triangle shows that the instruction manual must be referred to for information on how the machine works and its use.



The symbol formed by one square inside another square shows that the machine has double electrical insulation.



The European Community symbol shows that the machine complies with the current European Union legislation, as well as its transposition to local legislation.



The symbol of a rubbish bin crossed out and over a horizontal line shows that when the product is disposed of it must be done properly, placing it in a special selective electronic and electrical equipment container or through a dealer when purchasing a similar product, at no additional cost. It also shows that the machine was put on the market after 13th August 2005 (European Community Directive 2002/96/CE of Electrical and Electronic recycling, and its Spanish equivalent R.D.208/2005).

In accordance with what is set out in the aforementioned decree, FONESTAR is registered in the RAEE (Registro de Aparatos Eléctricos y Electrónicos) in a special section REI (Registro de establecimientos Industriales), with the entry number 001851.



The symbol RoHS (Restriction of Hazardous Substances) shows that the product has been designed and manufactured restricting the use of certain dangerous materials (Directive 2002/95/CE on the restriction of certain dangerous substances in electrical and electronic appliances, and its transferal to the Spanish regulations, R.D.208/2005).

*It is possible that some of these symbols do not appear on the machine.

EXEMPTION OF LIABILITY

The characteristics of the equipment and the content of the manual can change without forewarning.

FONESTAR, S.A. does not assume responsibilities regarding the inappropriate use of the equipment or the information supplied in this instruction manual, and specifically disclaims any implied liability for marketability or fitness for any other use.

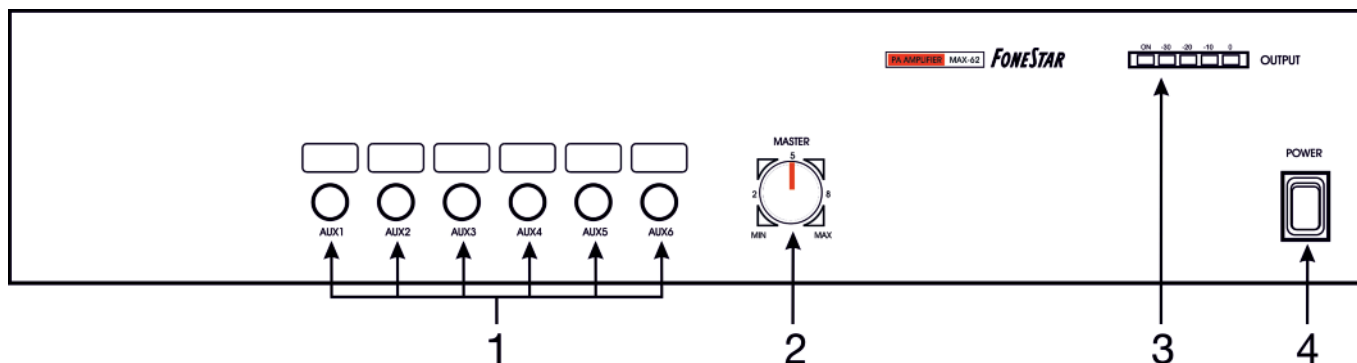
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DESCRIPTION

- 100 V line professional P. A. amplifier with phantom power supply, priority and selector for 6 auxiliary inputs.
- Power: 90 W maximum, 60 W RMS.
- 100 V line output and 8Ω low impedance.

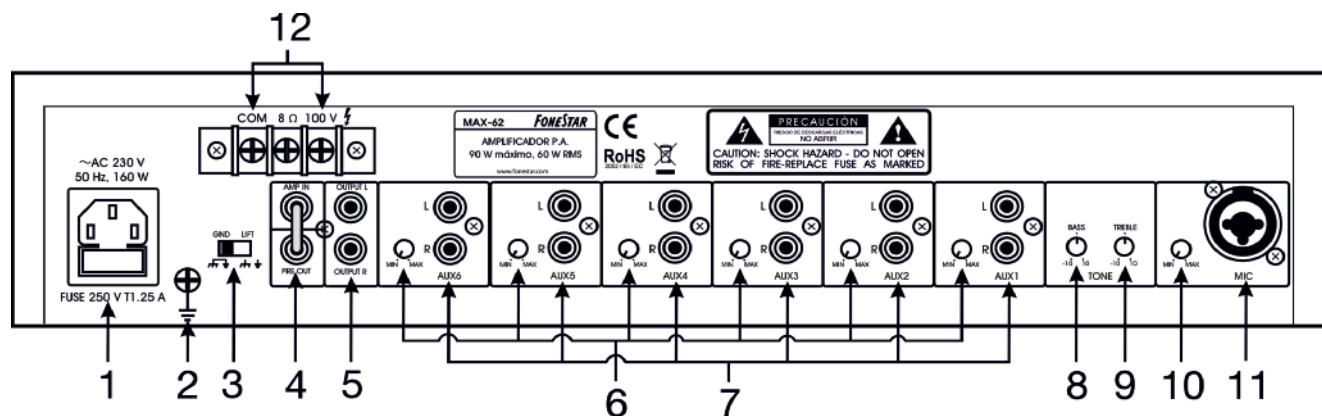
CONTROLS AND FUNCTIONS

FRONT PANEL



- 1.- **Output selectors AUX 1-6:** to choose the output signal from the 6 auxiliary inputs.
- 2.- **MASTER:** master output volume control.
- 3.- **OUTPUT:** output signal level LED indicators. They regulate the individual input volume controls or the MASTER output volume control so that the level does not exceed the green LED indicators. The red LED indicators indicate saturation or a distorted signal which can lead to damaging the speakers or the amplifier.
- 4.- **POWER:** amplifier ON/OFF switch.

BACK PANEL



- 1.- **AC current socket:** to connect the AC power supply cable.
- 2.- **Earth terminal:** earth screw. To be used if the electrical supply does not have one incorporated.
- 3.- **GND/LIFT:** switch which is used to disconnect the earth from the mass. If you can hear buzzing in your system due to the earth or a link to other equipment, move the switch to the LIFT position.
- 4.- **AMP IN/PRE OUT:** the bridge connection between the 2 RCA connectors communicates the output signal from the PRE OUT with the input from the AMP IN.
- 5.- **OUTPUT:** auxiliary stereo output, 2 X RCA 4 700 Ω 1 V.
- 6.- **Auxiliary input volume:** volume control for each one of the auxiliary inputs.
- 7.- **AUX 1-6:** stereo auxiliary inputs, 2 x RCA 47 000 Ω 1 V.
- 8.- **BASS:** bass tone control.
- 9.- **TREBLE:** treble tone control.
- 10.- **Mic. Volume:** volume control for the mic. input.

- 11.- **MIC:** balanced microphone input. Combo connector (XLR and 6.3 mm jack), 600 Ω 1 mV.
 12.- **Speaker output:** for the connection of low impedance (8 Ω) speakers in high impedance 100 V lines.

INSTRUCTIONS FOR USE

ON AND OFF

Before switching the system on, check that the output volume controls are at their minimum. Switch on the rest of the audio system, lastly the main system, and adjust the output volume. To switch the audio system off, adjust the output volume to its minimum and switch the main system off. Lastly, switch off the rest of the audio system.

PHANTOM POWER SUPPLY

The microphone MIC input lets you connect as many dynamic microphones as electret condenser. To enable phantom power supply (16V), necessary for electret condenser microphones, the PHANTOM ADJ jumper needs be changed to ON. This is found inside the system (see below).

NOTE: the amplifier is supplied with the PHANTOM ADJ jumper in the OFF position by default. This means without phantom power supply. Therefore condenser microphones will not work.

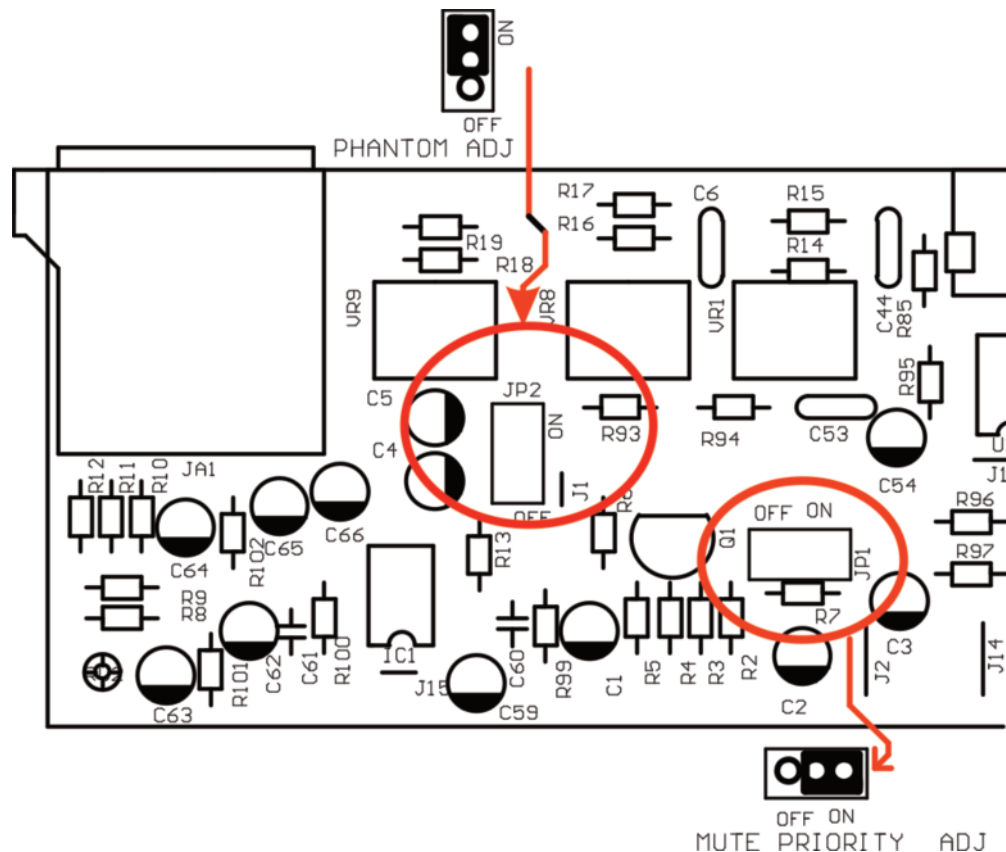
PRIORITY IN INPUTS

The priority function automatically weakens the input level with less priority, so that the message broadcast by those with more priority can be heard clearly.

The MIC input has maximum priority and the priority is activated by the signal level, or when a signal is detected in the MIC input, the rest of the inputs are weakened.

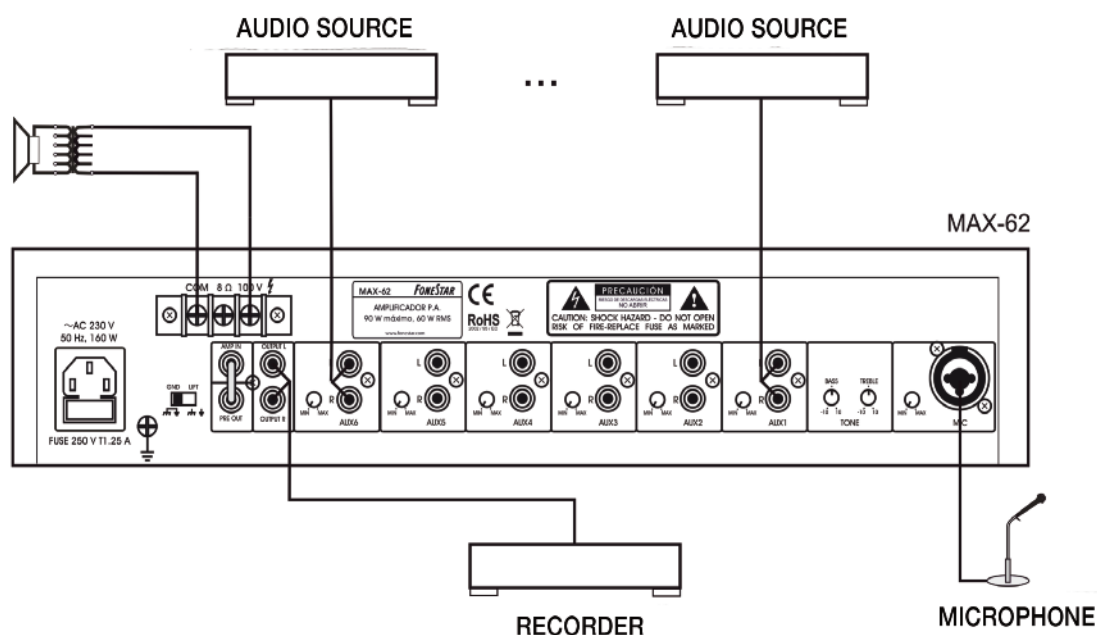
To enable the priority depending on signal level function in the MIC input the MUTE PRIORITY ADJ jumper found inside the system has to be changed to ON (see below).

NOTE: The amplifier is supplied with the MUTE PRIORITY ADJ jumper in the OFF position by default or with the priority depending on signal level deactivated.

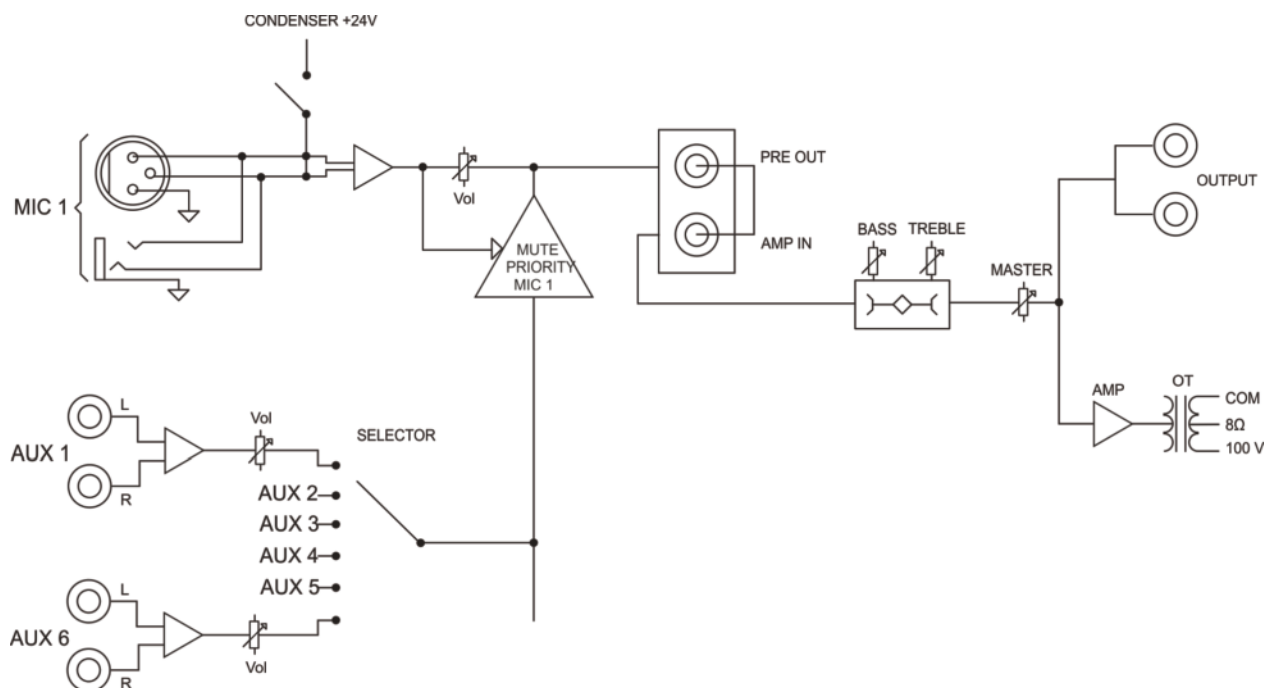


CONNECTION

- Make the connections with the amplifier and all the audio system components switched off and disconnected from the mains.
- Connect the audio sources (CD, video game console, music system, etc.) to each of the auxiliary inputs on the amplifier.
- Connect the microphone to the MIC input.
- Connect the speakers to the speaker output. Use the 8Ω low impedance output or the high impedance 100 V lines output depending on the type of speakers you are connecting. Do not use both types of output at the same time.
- If you are using the low impedance output, you must connect the speakers in a series/parallel circuit, so that the charge impedance of the speakers is the same as the output impedance of the amplifier and that the power supplied by the amplifier does not exceed that supported by the speakers.
- If you use the high impedance 100 V lines output, you must connect all the speakers in parallel and the total power of all the speakers must not exceed the power supplied by the amplifier.
- Once the connections have been made (in accordance with ones needs), connect the equipment to the mains and switch it on. Remember to turn the equipment on with the volume at its minimum.
- Adjust the volume to each auxiliary input with the controls on the back panel.
- After use, do not forget to switch off and disconnect the system from the mains.



BLOCK DIAGRAM



SPECIFICATIONS

	MAX-62
CHARACTERISTICS	P. A. amplifier. Phantom power supply. Priority paging. 6 auxiliary input selector.
POWER	90 W maximum, 60 W RMS
RESPONSE	50-15 000 Hz
INPUTS	1 balanced mic. combo (XLR and 6.3 mm stereo jack), 600 Ω 1 mV 6 auxiliaries, 2 x RCA, 47 000 Ω 1 V 1 amp in, RCA, 47 000 Ω 1 V
OUTPUTS	1 auxiliary, 2 x RCA, 4700 Ω 1 V 1 pre out, RCA 600 Ω 1 V
CONTROLS	Aux. input selector Earth disconnection GND lift
VOLUME CONTROLS	Mic. and aux. 1 to 6 on back panel, general volume
TONE CONTROLS	Bass: ± 10 dB to 100 Hz Treble: ± 10 dB to 10 000 Hz
PHANTOM	16 V in mic. 1, selectable
PRIORITY	Mic. 1 depending on signal level, selectable
IMPEDANCE	8 Ω and 100 V line, screw terminals
POWER SUPPLY	230 V AC, 160 W
DIMENSIONS	425 x 85 x 275 mm depth. 2U 19" rack
WEIGHT	8 kg
ACCESSORIES	Mounts for assembly in 19" rack

DECLARATION OF CONFORMITY

The 100 V line professional P.A. amplifier mod. **MAX-62** complies with the European Community Directives 2004/108/EC on Electromagnetic Compatibility and 2006/95/EC on Low Voltage.

Santander, 8th July 2011

Juan Vallejo
Technical Engineer, Sales Department

WARRANTY

This product has been tested and has passed the corresponding quality control prior to being put on the market. **FONESTAR** guarantees the suitability of the product for its specified use during a period of 2 years from the delivery date and commits itself to repair or substitute the goods as expressed in the Spanish law 'La Ley General para la Defensa de los Consumidores y Usuarios, Real Decreto Legislativo 1/2007 16 Noviembre'.

The lack of conformity in the first six months after purchase, due to a manufacturing defect, will be rectified with no more than showing the proof of purchase. After six months **FONESTAR** reserves the right to demand proof of the product being sold with that problem.

This warranty does not include damage produced by: inappropriate use or negligence, accidents, worn out parts due to use, breakages, burns, spilt liquids or other substances, excessive humidity, battery deterioration and internal manipulation of the device, the software or its components by unauthorized persons, and in general any use that is unrelated to the nature and purpose of the product.

If any service is needed during the warranty period because of lack of conformity, please contact the business or distributor where the product was purchased in no more than 2 months after being conscious of the problem. It is only necessary to contact **FONESTAR** if it is impossible or imposes an undue burden for them to solve it.

To benefit from this warranty it is necessary to show the proof of purchase with the date clearly visible, with no corrections or crossing out.

This document adds information, and never decreases the consumers' rights, which in all cases are protected by the Spanish law 'La Ley General para la Defensa de los Consumidores y Usuarios, Real Decreto Legislativo 1/2007 16 Noviembre'.



FONESTAR is a member of ECOEMBALAJES ESPAÑA, S.A. "ECOEMBES", with number 03497 and all our products carry the symbol, backed by our membership and subscription to the above mentioned organization with the recycling and subsequent management of our packaging.

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www.fonestar.com