

FONESTAR

MPZ-5125
P. A. AMPLIFIER
WITH 5 OUTPUT ZONES

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 lightning 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 2011/65/EU on the restriction of certain dangerous substances in electrical and electronic appliances, and its transferal to the Spanish regulations, R.D.219/2013).

*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

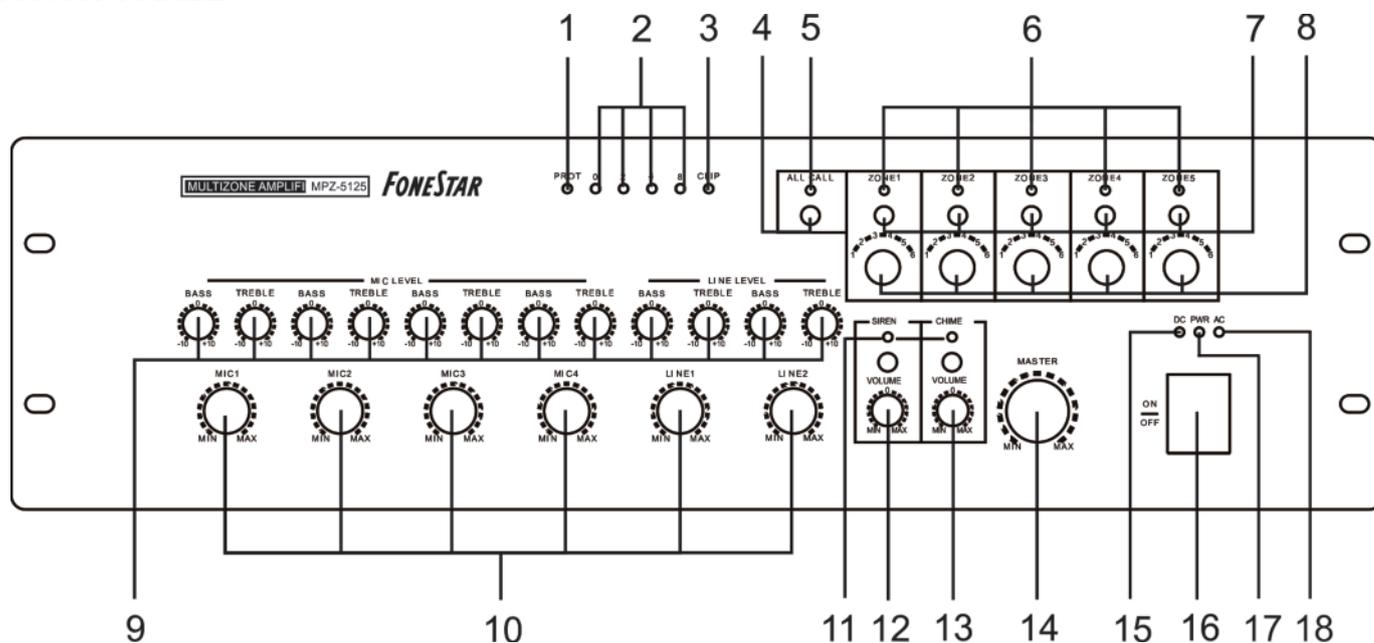
P. A. amplifier with 5 x 100 V line output zones and independent volume control per zone, with the possibility of remote paging through the zone selector microphone model M-512.

120 W RMS, 4 mic. inputs, 2 auxiliaries and 1 emergency.

Chimes.

CONTROLS AND FUNCTIONS

FRONT PANEL

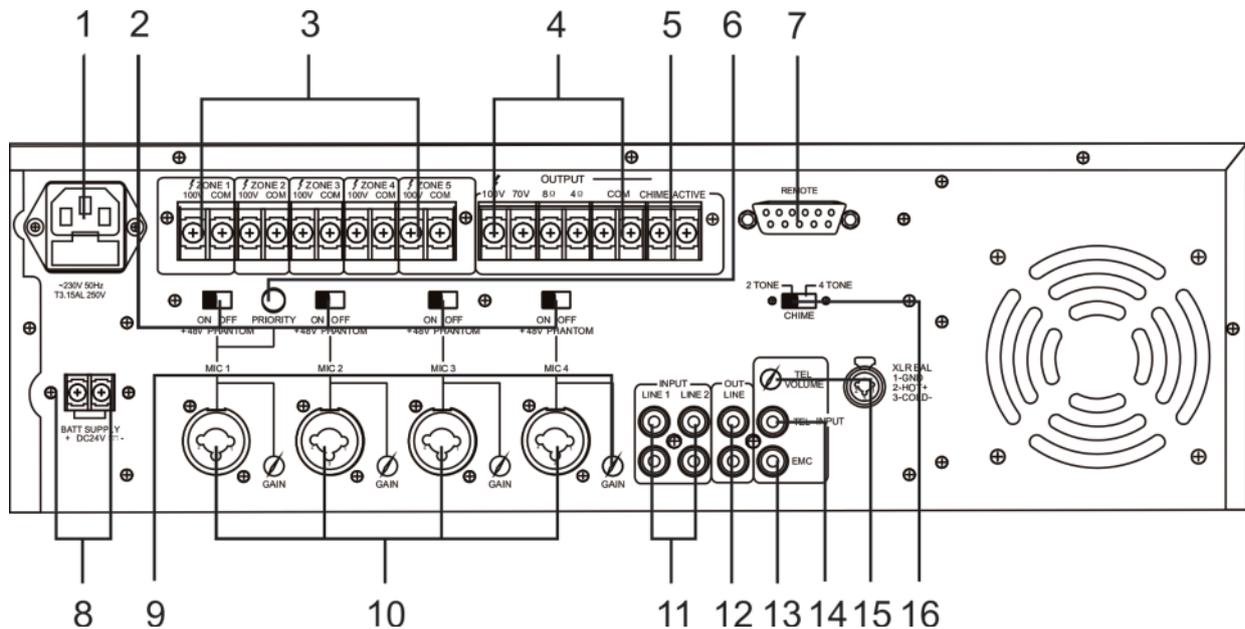


- 1.- **PROT:** LED indicator which lights up when an anomaly is detected due to temperature, surges due to voltage or current, or short-circuit. When the protection is activated, the output signal is cut and in this case you have to switch off the amplifier, correct the cause of the anomaly, let the amplifier stand for a few minutes and then switch it on again. If the protection continues, then call the technician.
- 2.- LED indicators which indicate the level of the output signal.
- 3.- **CLIP:** LED indicator which lights up when the output signal is saturated. Lower the MASTER volume control until the LED indicator goes off.
- 4.- **ALL CALL:** button for activating/deactivating all zones at the same time.
- 5.- **ALL CALL:** LED indicator which lights up when all zones are active.
- 6.- **ZONE 1 to 5:** LED indicators for each zone. They light up when the corresponding zone is active.
- 7.- **ZONE 1 to 5:** zone selection buttons. For activating or deactivating each zone.
- 8.- Control wheel with 6 positions which regulates the individual volume in each zone.
- 9.- **BASS, TREBLE:** control wheels which strengthen or weaken the bass or treble frequencies, ± 12 dB on each of the microphone and line inputs.
- 10.- **MIC 1 to 4, LINE 1 to 2:** control wheels which regulate the volume in the microphone and line inputs.
- 11.- **CHIME/SIREN:** LED indicators which light up when the chime or the siren is selected, respectively.
- 12.- **SIREN/VOLUME:** siren selector button. If the button is pressed, the siren will be heard in all the active zones. It is adjusted using the siren volume control wheel.
- 13.- **CHIME/VOLUME:** chime selector button. If the button is pressed, the chime will be heard in all the active zones. It is adjusted using the chime volume control wheel.
- 14.- **MASTER:** control wheel which regulates the master volume output for all inputs.
- 15.- **DC:** LED indicator which lights up when the system is connected to 24 V DC.
- 16.- **ON/OFF:** amplifier on/off switch.

17.- **PWR:** system LED on/off indicator.

18.- **AC:** LED indicator which lights up when the system is connected to 230 V AC.

BACK PANEL



- 1.- **AC socket:** for connecting the AC power supply cable.
- 2.- **ON/OFF + 48 V PHANTOM:** switches which allow you to activate or deactivate the 48 V DC Phantom for each one of the microphone inputs 1 to 4.
- 3.- **ZONE 1 to 5:** speaker outputs for each zone. For the connection of speakers in a 100 V high impedance line.
- 4.- **OUTPUT:** general speaker output. For the connection of speakers in 4 or 8 Ω low impedance and in 100 or 70 V high impedance lines, connect the speaker line between the COM terminal and the impedance or line, in the desired V.
- 5.- **CHIME ACTIVE:** chime activation on contact closure. Chime should be selected in the CHIME, SIREN selector button and the CHIME ACTIVE button should also be deactivated.
- 6.- **PRIORITY:** button which allows you to activate or deactivate priority through the microphone 1 level over the rest of the inputs.
- 7.- **REMOTE:** input for connecting the zone selector microphone model **M-512**, female D15 connector.
- 8.- **BATT SUPPLY + DC24V-:** 24 V DC power supply terminals. For the amplifier to work with 24 V DC power supply, batteries, emergency power supply systems, etc. Make the connection with 2.5 mm² section cable to the – negative and + positive terminals.
Note: when using the amplifier with 24 V DC, the power is reduced by approximately 20%.
- 9.- **GAIN:** control wheels which regulate the MIC 1 to 4 input signal levels.
- 10.- **MIC 1 to 4:** microphone inputs which use a combo connector (XLR and 6.3 mm jack), accepting signals from balanced microphones, unbalanced from 30 – 600 Ω and balanced electret condenser microphones that need 48 V phantom, present in pins 2 and 3 in the XLR connector.
- 11.- **INPUT LINE 1 and 2:** line inputs. For connecting audio sources, 2 x RCA connectors.
- 12.- **OUT LINE:** line output. Output signal for recording, mixer, power amp, etc., 2 x RCA connectors.
- 13.- **EMC:** emergency input prepared for connecting to the emergency output, RCA connector. When a signal is detected in this input, it is sent to all the output zones at maximum volume and with priority over the rest of the inputs.
- 14.- **TEL. INPUT:** telephone input terminal, RCA connector. For connecting to the telephone switchboard output, for paging from the switchboard and having priority over the rest of inputs. Consult the

switchboard characteristics in order to adjust it to the amplifier input level.

15.- **TEL. VOLUME:** volume control for the TEL. INPUT. It allows you to adjust the volume of the telephone switchboard which is connected to the TEL. INPUT terminal.

16.- **CHIME:** for selecting between the 2 and 4 tone chimes.

INSTRUCTIONS FOR USE

ZONE SELECTION WITH BACKGROUND MUSIC

Select the zones where you want the background music to be played, by pressing the corresponding ZONE 1 to 5 buttons on the front panel of the system.

The background music will be cut off when there is an announcement in one of the zones. Once the announcement has finished, the background music will return to the selected zones.

CONNECTING THE M-512 MICROPHONE

To connect the M-512 model microphone to the system, use the cable supplied with the microphone.

The microphone is powered through the audio and data cable. In the case of the distance being more than 10 m there could be loss through the audio and data cable. Therefore, the microphone should be powered with a local 24 V DC power supply with the supplied cable.

PAGING WITH THE M-512 MICROPHONE

Select the zones where you want the announcements to be sent, using the CH 1 to 5 buttons on the microphone and then press the TALK button. When the announcement has finished, press the TALK button again and disable the zone selection in the **M-512** model microphone.

Note: The zone selection is disabled in the amplifier while there is a zone selected in the **M-512** model microphone.

CHIMES

The chimes can be used in 3 ways:

The chimes can be reproduced at a distance through the microphone mod. M-512. Firstly, select if you want to activate 2 or 4 chime tones on the back panel of the microphone. Then, select the zone or zones where you want the announcement to be sent using CH 1 to 5 buttons and press the CHIME button to send it. The TALK button must be pressed down for the chimes to be played.

To play the chimes from a distance, firstly, you must activate the chimes on the front panel using the SIREN CHIME button. Then you have to select the 2 or 4 chime tones on the back panel of the amplifier. Afterwards, in order to play the chimes you have to close the CHIME ACTIVE contacts on the back panel using the push button (or the microphone push button).

In order to play the chimes from the amplifier, they must be activated on the front panel using the SIREN CHIME button. Select if you want 2 or 4 chime tones on the back panel of the amplifier. Then, play the chimes with the CHIME ACTIVE button on the front panel.

SIREN

To play the siren from the amplifier, it must be activated on the front panel with the SIREN button. Use the VOLUME control button to adjust the volume in the siren output.

When you activate the siren, you will only be able to hear it in the selected zones.

Note: So that the siren has priority depending on the level, the VOLUME control must be at least at mid volume.

EMC EMERGENCY INPUT

When a signal is detected in the EMC input, this is sent to all output zones at maximum volume.

INPUT PRIORITY

The priority function automatically weakens the input levels with lower priority so that the message sent out by those with higher priority can be heard clearly.

The EMC input has maximum priority over the rest of the inputs. The EMC input priority is activated when a signal is detected in the input connector, automatically weakening the TEL. INPUT, the microphone model **M-512** signal, MIC 1 to 4 and LINE 1 and 2 inputs so that the message can be heard clearly.

The second level of priority corresponds to the TEL. INPUT, together with the microphone model M-512 signal, which have priority over the rest of the inputs. The priority of both inputs is activated when a signal is detected in the input connector and therefore automatically weakening the MIC1 to 4 and LINE 1 and 2 inputs so that the message can be heard clearly.

The next priority level is formed through MIC 1 (priority in the MIC 1 input is enabled with the PRIORITY button on the back panel), SIREN or CHIME. These inputs have priority over the MIC 2 to 4 and LINE 1 and 2 inputs.

CONNECTION

Make the connections with the amplifier and all the audio system components switched off and disconnected from the power supply.

Connect the microphones through the MIC 1 to 4 inputs and select if you want to activate phantom (for condenser microphones) or not (dynamic microphones). If you want, you can send announcements to each zone individually by connecting the M-512 microphone through the REMOTE port.

Connect the audio sources through the LINE 1 or 2 inputs.

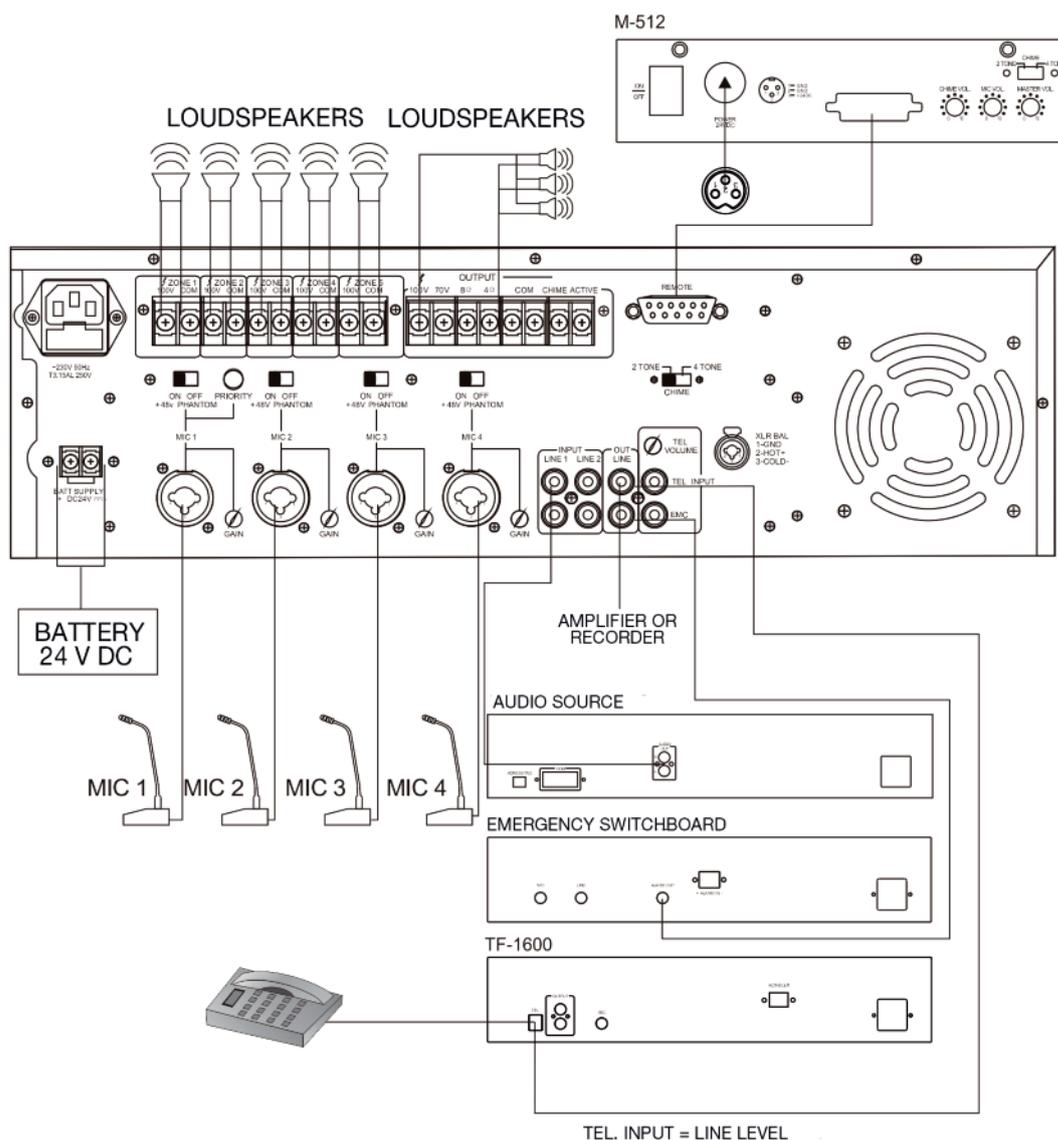
If you wish to use the amplifier as just one zone, connect the speakers to the speaker OUTPUT. Use the low impedance 4 or 8 Ω output or the high impedance 100 or 70 V line output, according to the type of speakers that you are going to connect. Do not connect both types of output at the same time.

If you use the low impedance output, the speakers must be connected in a series/parallel circuit so that the speaker load impedance is equal to the amplifier output impedance and the power supplied by the amplifier does not exceed what is withstood by the speakers.

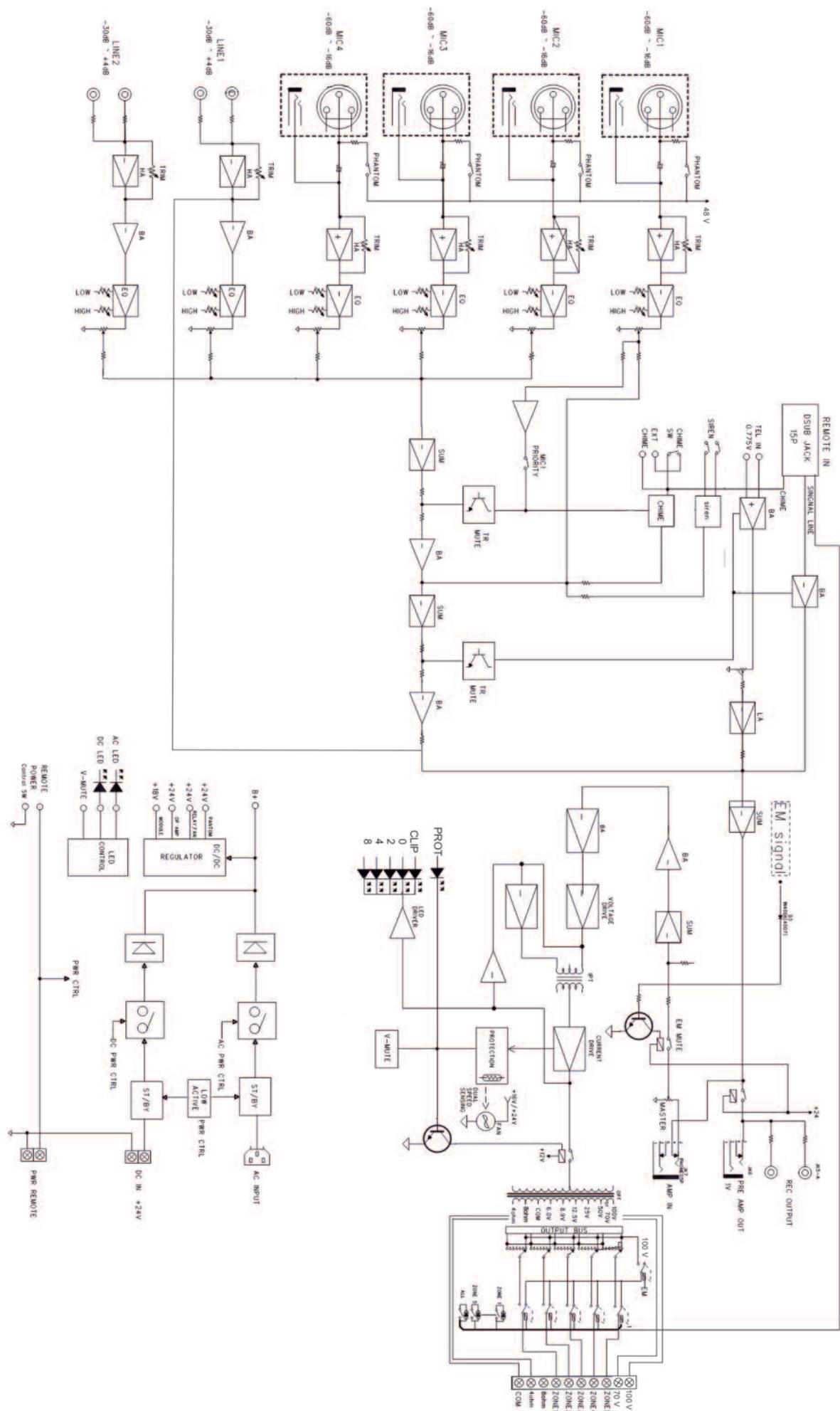
If you use the high impedance 100 or 70 V line output, you must connect all the speakers in parallel and the sum of the speaker power must not exceed the power supplied by the amplifier. If you want to use an amplifier with zones, connect the corresponding speakers to each zone to the corresponding speaker output ZONE 1 to 5. The speakers must be 100 V line and connect in parallel so that the sum of the power of all the speakers does not exceed the power supplied by each zone (25 W).

If you want to record the amplifier output or connect it to another system, use the OUT LINE output.

Once the connections have been made according to your needs, connect the equipment to the mains and switch it on. After use, do not forget to switch it off and disconnect the equipment from the mains.



BLOCK DIAGRAM



SPECIFICATIONS

	MPZ-5125
CHARACTERISTICS	P. A. amplifier. 5 zones of selectable loudspeakers with independent volume control. Microphone input with zone selector. Phantom power supply, priority, chimes, siren and emergency paging.
POWER	120 W RMS
RESPONSE	20-20 000 Hz ± 3 dB
DISTORTION	Harmonic: < 0.5%
INPUTS	4 balanced mics., combo (XLR and 6.3 mm stereo jack) 600 Ω 2.45 mV, adjustable 2 auxiliaries, 2 x RCA 47 000 Ω 250 mV 1 tel. input, RCA 10 000 Ω 300 mV 1 emergency, RCA 10 000 Ω 300 mV 1 mic. with zone selector, D15 30 mV 600 Ω
OUTPUTS	1 line out, 2 x RCA 600 Ω 1 V
CONTROLS	Tone: Bass: ± 10 dB Treble: ± 10 dB Volume: mics. 1 to 4, aux 1-2, chimes, siren and general volume
PHANTOM	48 V in mics. 1 to 4, selectable
PRIORITY	Emergency through signal level Tel. input through signal level Microphone with zone selector through signal level Input 1 through signal level, selectable Chimes on contact closure or with push button Siren with push button
CHIMES	2 chimes, selectable
ZONE SELECTOR	5 selectable speaker zones with independent volume control
IMPEDANCE	4 and 8 Ω and 100 and 70 V lines, screw terminals
POWER SUPPLY	230 V AC, 200 W and 24 V DC, 5A
DIMENSIONS	482 x 132 x 450 mm depth. 3 U 19" rack
OPTIONAL	M-512 : microphone with zone selector

DECLARATION OF CONFORMITY

The P. A. amplifier with 5 output zones model MPZ-5125 complies with the European Community directives 2004/108/EC on Electromagnetic Compatibility and 2006/95/EC on Low Voltage.

Santander, 11th April 2013



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