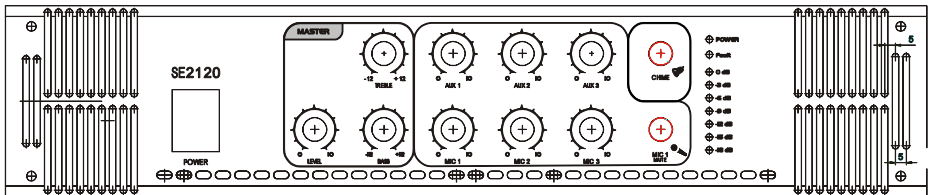




NJS402



250 Watt 100 Volt line Mixer Amplifier

IMPORTANT

Installer and Users please note:

These instructions should be read carefully and left with the user of the product for future reference.

Before Use

You must inspect the product including its cable and plug for any signs of damage. If the product is damaged, DO NOT use it, and contact your supplier immediately.

Product Safety

- This product can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the product in a safe way and understand the hazards involved.
- Children shall not play with the product.
- Cleaning and user maintenance shall not be made by children without supervision.
- For indoor use only.
- Make sure that air intakes and exhausts are not obstructed.
- Do not use this product in the immediate surroundings of a bath, shower or swimming pool.
- Do not place the mains lead beneath a carpet or rug.
- Do not insert any object into this product through the grilles. This may damage the heater or result in overheating or electric shock.

PAT Testing

When used in a workplace, this product must be safety-tested yearly by a qualified electrician (PAT Tested) in order to comply with the Electricity at Work Regulations.

We recommend that it is PAT tested regularly when used in a domestic environment.

General Safety Requirements

Domestic wiring must be tested periodically by a qualified electrician at least once every 10 years or at every change of occupancy.

For office and retail premises, and buildings such as village halls, the wiring must be inspected at least once every 5 years.

It is recommended that all buildings be fitted with smoke alarms (it is mandatory for new buildings).

Installation

The NJS402 must be installed by a competent electrician in accordance with the current IEE wiring regulations.

Connect the NJS402 to the mains supply (nominally 230V AC).

The NJS402 must be earthed. NEVER disconnect the earth, even in an attempt to prevent 'hum'. If the earth were disconnected, it could result in equipment connected to the input (even indirectly through a mixer), such as microphones, becoming live in the event of a fault (such as a liquid spillage into the amplifier).

Install the NJS402 away from sources of moisture; avoid areas where drinks can be spilled onto the amplifier as this may cause serious damage.

Avoid using microphone leads longer than 5 m. If longer microphone cable runs are required, then an amplifier with balanced-line microphone inputs is required.

For connection of 100 V line loudspeakers, two-core 0.75mm² cable, such as E548AC should be used. Loudspeaker cables may not be run in the same conduit as mains cabled.

100 Volt line loudspeakers.

The 100V line system was developed to allow a long distance between loudspeakers and the amplifier, and to allow a large number of speakers to be connected to each amplifier.

In order to do this, the audio is transmitted at a much higher voltage (100V rms) than with a conventional low-impedance amplifier, such as a hi-fi or disco amplifier.

Each loudspeaker is coupled to the amplifier by an inbuilt transformer. The transformer is generally fitted with a switch or a set of terminals that can be used to select the power supplied to the speaker. Thus, every loudspeaker connected to the 100V line can be set to the most appropriate power level.

Inputs

Microphones:

Connect the main microphone to the socket on the front panel. Use a mono 6.3mm jack plug. If the microphone has a screened two-core cable, connect one core to the screen.

Connect any auxiliary microphones to the MIC2 and MIC3 sockets on the rear panel.

Line inputs:

Connect any line inputs (such as radio, CD player, MP3 player) to the LINE1, LINE2 and LINE3 inputs on the rear panel using RCA phono plugs. These are generally used for background music.

Outputs

Connect the loudspeakers to the spring-terminals on the rear panel.

EITHER:

Connect low-impedance speakers between the **4-8Ω** terminal and the **COM** terminal. **DO NOT connect a combined impedance lower than 4 Ω.**

Make no connections to the **70V** or **100V** terminals.

The following combinations MAY be connected

Speakers	Combined impedance
1 × 16 Ω	16 Ω
2 × 16 Ω	8 Ω
3 × 16 Ω	5.3 Ω
4 × 16 Ω	4 Ω
1 × 16 Ω, 1 × 8 Ω	5.3 Ω
2 × 16 Ω, 1 × 8 Ω	4 Ω
2 × 8 Ω	4 Ω
1 × 4 Ω	4 Ω

The following combinations MUST NOT be connected

Speakers	Combined impedance
5 × 16 Ω	3.2 Ω
3 × 8 Ω	2.7 Ω
4 × 8 Ω	2 Ω
1 × 4 Ω, 1 × 8 Ω	2.7 Ω
1 × 16 Ω, 2 × 8 Ω	3.2 Ω
2 × 4 Ω	2 Ω

OR:

Connect 100 V line speakers between the **100V** terminal and the **COM** terminal.

ADD UP the total of the stated powers on each loudspeaker, or, if the speakers are fitted with selector switches, add the selected power.

The total power of all the connected speakers **MUST BE LESS THAN 250 W**.

DO NOT connect low impedance speakers to the 100V terminal,

Make no connection to the **4-8Ω** or **70V** terminals

Setting Up

ALWAYS turn the MASTER volume controls to zero before switching on; do not touch the speaker outputs whilst the amplifier is running as this could result in electric shock.

Set the MASTER level control to about 75% of full clockwise rotation.

Then adjust the microphone level controls MIC1, MIC2, and MIC3 until the 0dB indicator illuminates only on the loudest peaks.

Adjust the line level control LINE 1, LINE 2 and LINE 3 for a comfortable background music level

Adjust the MASTER treble and bass controls for the greatest clarity when using the microphone.

The MUTE control allows the level of background music to be reduced automatically when the microphone MIC1 is being used. Adjust the MUTE control (on the rear panel) for the greatest clarity of microphone announcements.

Note that the MUTE facility only operates on microphones connected to the MIC1 input..

Operation

Press the CHIME button for a two-tone chime. When the Chime has finished, press the “push-to-talk” switch on the microphone and make the announcement.

Release the “push-to-talk” switch when the announcement is completed.

If using a microphone without a “push-to-talk” switch, then rotate the MIC volume control fully anticlockwise when not in use. After the chime has finished, rotate

Note that a licence is required from Phonographic Performance Limited to play radio or copyrighted music in any public place (including shops, factories, offices, hotels and public houses)

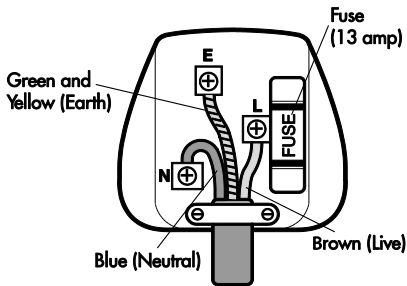
Maintenance

Before cleaning, turn the amplifier off, and disconnect from the mains supply. The product may then be cleaned using a damp cloth with a drop of washing-up liquid to remove any dust or dirt from the case. Do not use stronger detergents or solvents as these may damage the surface finish.

Using a dry 1" (25mm) paint-brush, remove any dust from the grilles.

If the mains lead is damaged, it must be replaced by the manufacturer or an authorised service centre.

If the mains plug needs to be replaced, proceed as follows:



- Connect the brown wire to the terminal labelled "L".
- Connect the blue wire to the terminal labelled "N".
- Connect the green/yellow wire to the terminal labelled with the earth symbol or "E".
- Make sure that the cord-grip is positioned correctly (over the outer sheath of the cable) and is fully tightened.

Technical Specification

Dimensions:	483x88x360 mm
Weight:	11.5 kg
Cooling:	Forced air cooling via 80mm low noise DC fan.
Maximum output power:	250 W RMS
Maximum output voltage:	280 V peak-peak.
Input impedance (microphone):	600 Ω
Input impedance (line):	10 k Ω
Input sensitivity (microphone):	3 mV (-48 dBm)
Input sensitivity (line):	200 mV (-12 dBm)
Frequency response:	80 Hz to 16 kHz \pm 3 dB
Hum and noise:	-85 dB
Harmonic Distortion:	0.5 % at full power output
Power requirement:	230V~ 50Hz 300 VA
Fuse:	T3.15A 5x20mm (3.15 Amp ANTI-SURGE 5x20mm)
Connections:	
Mains:	built-in cable.
Input (microphone):	¼" jacks
Input (line):	RCA phono plugs
Output:	spring terminals

Disposal and Recycling

You must not dispose of this product with domestic household waste.

Most local authorities have specific collection system for products and disposal is free of charge to the end-user.

When replacing an existing product with a similar new product your retailer may take the old product for disposal.

Service Warranty

New Jersey Sound products are distributed by:

Electrovision Ltd.,

Lancots Lane,

Sutton,

St. Helens,

Merseyside.

WA9 3EX

Telephone: 01744 745000

Fax: 01744 745001

e-mail: sales@electrovision.co.uk

Web-site: www.electrovision.co.uk

Electrovision guarantees the product free from defects in materials and workmanship for a period of twelve months.

Should this product be operated under conditions other than those recommended, at voltages other than the voltage indicated on the product, or any attempts made to service or modify the product, then the warranty will be rendered void.

The product you buy may sometimes differ slightly from illustrations. This warranty is in addition to, and does not affect, your statutory rights.

If you have any problems with this product, please call our Help Desk on (0845) 459 4816.