

# PORTABLE MIXER TYPE ELA 62-02

- Suitable for outside productions
- 9+6 inputs switchable into two bus bars
- Monitor and headphone outputs
- May be used in duplex
- Amplifiers made with integrated circuits



ITALTEL s.p.a.





## GENERAL CHARACTERISTICS

The ELA 62-02 is small control desk, designed by RTB - BTR for making outside recordings. There are many ways of powering it (220 V 50 Hz mains, rechargeable internal batteries, external battery of approx. 12 V). This enlarges its field of use and makes it suitable for sound recording which needs preamplifiers, mixers, equipment interconnections, various recordings, Vu-meter.

The rational design and its versatility enables the equipment to be used to great advantage in small recording studios, in television, in broadcasting and in musical groups and orchestras. All the controls and output sockets for the two bus bars are mounted on the front panel; the remaining output and input sockets are mounted in two recesses at the sides of the instrument.

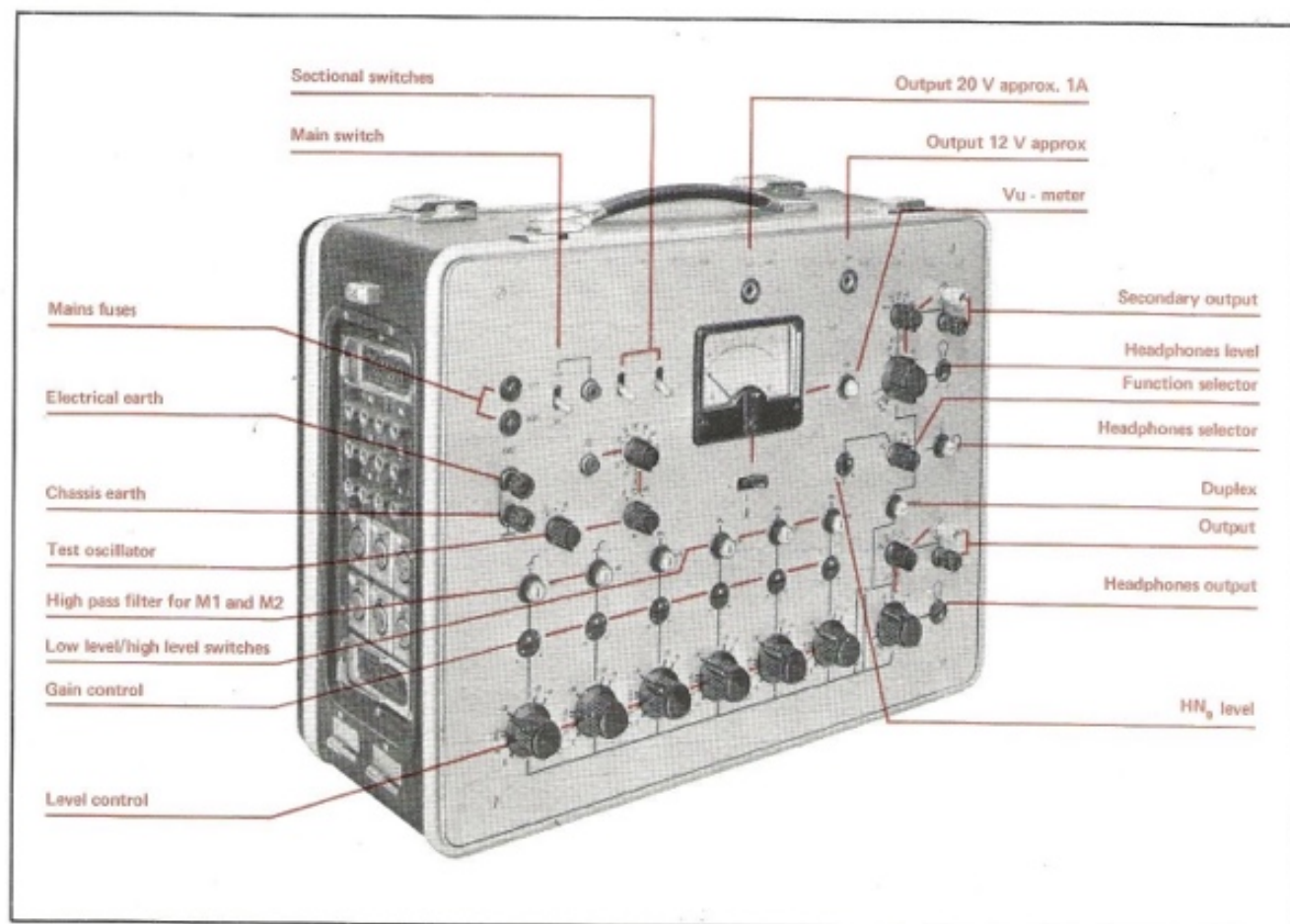
The ELA 62-02 is constructed entirely with Silicon transistors and integrated circuits mounted on fiberglass printed circuit boards. Modular techniques are used and the Gold plated connectors are inserted directly on the card.

Main controls (shown in figs. 1-2-3) are:

- 6 + 4 inputs, which may be switched onto six mixer paths
- 5 inputs mixed directly with the preceeding
- 2 independant outputs for outputs of +15 dB; + 12 dB; + 9 dB; + 6 dB with a 600  $\Omega$  load
- 4 monitor outputs
- 2 headphone outputs
- 1 sampling oscillator generating 30 test frequencies
- 1 Vu-meter switchable onto either of the two outputs
- 1 220 V  $\cong$  50 Hz mains supply unit
- 1 internal 12 V battery

## DESCRIPTION

The ELA 62-02 has six low level microphone inputs (M1 to M6), of these 4 may be switched to high level with a plug (HN3, HN4, HN5, HN6) and 2 can have a high pass filter inserted into them. Inputs M1, M2, M3, M4 use a 'Tuchel' type of recessed socket.



High level HN<sub>3</sub>

High level CUE 1,  
CUE 2

High level HN<sub>5</sub>,  
HN<sub>6</sub>, HN<sub>7</sub>, HN<sub>8</sub>

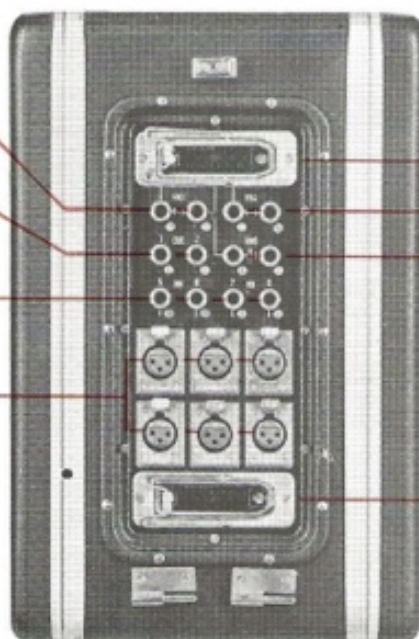
Low level inputs M1,  
M 2, M 3, M 4, M 5

Tuchel type socket  
for HN<sub>3</sub>, HN<sub>4</sub>, HN<sub>9</sub>

High level HN<sub>4</sub>

High level HN<sub>9</sub>

Tuchel type  
socket for  
M 1, M 2, M 3, M 4



Main output

Main monitor outputs

Main headphones

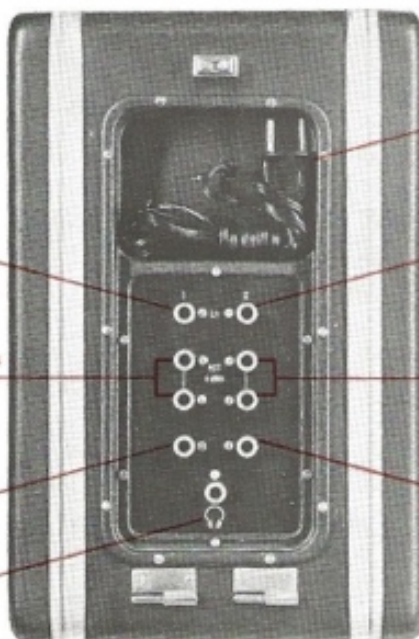
Supplementary  
headphones

Mains plug

Secondary output

Secondary  
monitor outputs

Secondary  
headphones



In addition to the mentioned four sockets, it is possible to use some supplementary high level inputs; these are as follows:

- 2 high level Jack inputs (CUE1, CUE2) for connecting the equipment to tape recorders, turntables, etc.
- 2 high level inputs for general use (HN<sub>7</sub>, HN<sub>8</sub>)
- 1 high level input, with a separate gain control (HN<sub>9</sub>); this can have a band pass filter inserted

with a Jack socket and a Tuchel socket.

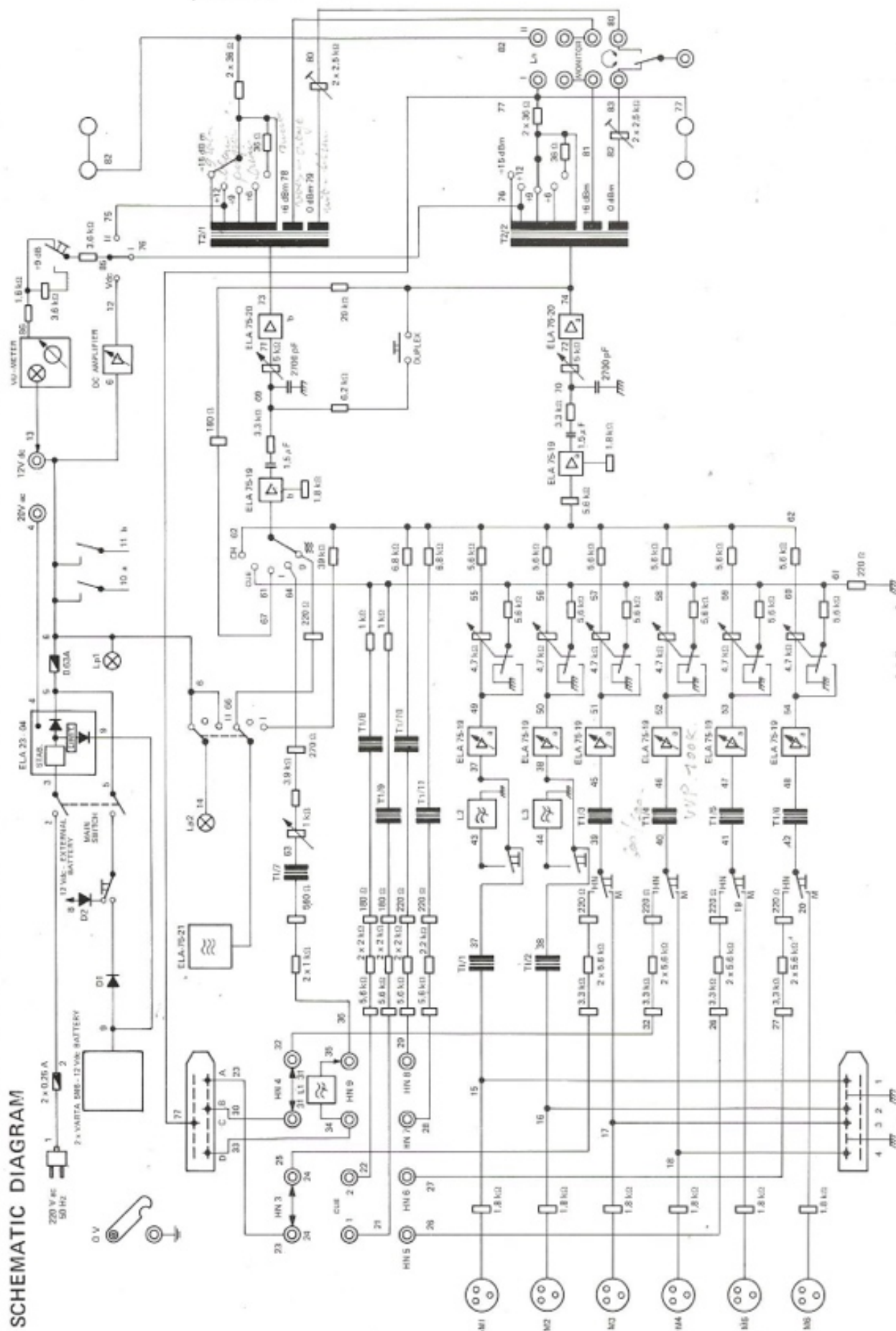
The above sockets are at the end of two bus bars, which can be connected in duplex; these are identified as two rows of outputs. These lines are separately available either as line outputs or as outputs for the monitor and headphones. Another possibility is putting a sampling oscillator across the lines to measure the output that is on them.

## TECHNICAL CHARACTERISTICS

— Supply . . . . .	220 V $\approx$ 50 Hz
internal battery . . . . .	12 V dc
external battery . . . . .	12 V dc
— Consumption . . . . .	$\approx$ 40 VA
— Low level inputs . . . . .	symmetrical input
impedance, from 40 Hz to 15000 Hz . . . . .	$\geq$ 1000 $\Omega$
voltage gain, adjustable . . . . .	17 to 52 dB
level continuously adjustable with an excursion . . . . .	$\geq$ 50 dB
normal input level . . . . .	-58 dB
— High level inputs . . . . .	symmetrical input
impedance, from 40 Hz to 15000 Hz . . . . .	$\geq$ 2200 $\Omega$
adjustment level of only HN <sub>9</sub> . . . . .	$\geq$ 60 dB
normal input level . . . . .	-58 dB
— Outputs . . . . .	symmetrical outputs
impedance of main outputs, from 40 to 15000 Hz, with switch in the + 15 dB position . . . . .	$\leq$ 100 $\Omega$
maximum output level . . . . .	+ 24 dB, with 600 $\Omega$ load
normal output level . . . . .	+ 15 dB, with 600 $\Omega$ load
monitor output . . . . .	+ 6 dB, with 5600 $\Omega$ load
headphones output . . . . .	0 dB, with 5600 $\Omega$ load
— Tone correction . . . . .	
high pass filter . . . . .	$f_t = 300$ Hz at HN <sub>9</sub>
low pass filter . . . . .	$f_t = 120$ Hz at M1 and M2
— Maximum loop gain . . . . .	74 dB $\pm$ 1 dB
— Pass band . . . . .	40 to 15000 Hz $\pm$ 1 dB
— Distortion . . . . .	$\leq$ 0.5 % for $V_u = + 15$ dB $\leq$ 1 % for $V_u = + 24$ dB
— Background noise, referred to the input . . . . .	-15 dB
— Maximum dimensions . . . . .	
width . . . . .	480 mm
height . . . . .	360 mm
depth . . . . .	220 mm
— Weight . . . . .	approx. 20 kg (44 lbs.)



### SCHEMATIC DIAGRAM



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