

## RESISTANCE SUBSTITUTION BOX

## Model RS-500



ELENCO

## INTRODUCTION

The RS-500 Resistance Substitution Box is a convenient instrument for determining the desired resistance values in circuits under design or test. The resistance obtainable is from $0 \Omega$ to $11,111,110 \Omega$ in 1 ohm steps. All resistors are precision $1 \%$ resistors.

## OPERATION

All of the resistors are wired in series. A switch on the front panel shorts each resistor. Putting the switch in the ON (up) position removes the short and places the resistor across the output terminals. The two green binding posts serve as the output terminals. To place any resistance across the output terminals turn ON those switches that add up to the desired resistance. For example, for $5,071 \Omega$, turn on the $3 \mathrm{k} \Omega, 2 \mathrm{k} \Omega, 40 \Omega, 30 \Omega$ and $1 \Omega$ switches.

## TWO YEAR WARRANTY

All Elenco models are guaranteed for two full years on all parts and service. For the first 3 months, your power supply is covered at absolutely no charge. For the remaining 21 months, a nominal service charge is required to cover shipping and handling.

When returning merchandise for repair, please include proof of purchase, a brief letter of explanation of problem, and sufficient packing material. Before returning any merchandise please call our service department at (847) 541-3800 to obtain a return authorization number (RMA).

Service Department

## PARTS LIST

| RESISTORS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Qty | Description | Part \# | Qty | Description | Part \# |
| $\square 1$ | $1 \Omega 1 \% 1 W$ | 111033 | $\square 1$ | $3 \mathrm{k} \Omega 1 \% 1 \mathrm{~W}$ | 143032 |
| $\square 1$ | $2 \Omega \quad 1 \% 1 W$ | 112033 | $\square 1$ | $4 \mathrm{k} \Omega 1 \% 1 \mathrm{~W}$ | 144032 |
| $\square 1$ | $3 \Omega$ 1\% 1W | 113033 | $\square 1$ | $10 \mathrm{k} \Omega 1 \% 1 \mathrm{~W}$ | 151032 |
| $\square 1$ | $4 \Omega \quad 1 \% 1 W$ | 114033 | $\square 1$ | 20k $\Omega 1 \% 1 \mathrm{~W}$ | 152032 |
| $\square 1$ | $10 \Omega 1 \%$ 1W | 121033 | $\square 1$ | 30k $\Omega 1 \% 1 \mathrm{~W}$ | 153032 |
| $\square 1$ | $20 \Omega 1 \%$ 1W | 122033 | $\square 1$ | $40 \mathrm{k} \Omega 1 \% 1 \mathrm{~W}$ | 154032 |
| $\square 1$ | $30 \Omega 1 \%$ 1W | 123033 | $\square 1$ | $100 \mathrm{k} \Omega 1 \% 1 / 2 \mathrm{~W}$ | 161031 |
| $\square 1$ | $40 \Omega 1 \%$ 1W | 124033 | $\square 1$ | 200k $\Omega 1 \% 1 / 2 \mathrm{~W}$ | 162031 |
| $\square 1$ | $100 \Omega 1 \% 1 W$ | 131032 | $\square 1$ | $300 \mathrm{k} \Omega 1 \% 1 / 2 \mathrm{~W}$ | 163031 |
| $\square 1$ | $200 \Omega 1 \%$ 1W | 132032 | $\square 1$ | $400 \mathrm{k} \Omega 1 \% 1 / 2 \mathrm{~W}$ | 164031 |
| $\square 1$ | $300 \Omega 1 \% 1 W$ | 133032 | $\square 1$ | $1 \mathrm{M} \Omega 1 \% 1 / 2 \mathrm{~W}$ | 171031 |
| $\square 1$ | $400 \Omega 1 \% 1 W$ | 134032 | $\square 1$ | $2 \mathrm{M} \Omega \quad 1 \% 1 / 2 \mathrm{~W}$ | 172031 |
| $\square 1$ | $1 \mathrm{k} \Omega 1 \% 1 W$ | 141032 | $\square 1$ | $3 \mathrm{M} \Omega \quad 1 \% 1 / 2 W$ | 173031 |
| $\square 1$ | $2 \mathrm{k} \Omega 1 \% 1 \mathrm{~W}$ | 142032 | $\square 1$ | $4 \mathrm{M} \Omega \quad 1 \% 1 / 2 \mathrm{~W}$ | 174031 |


|  | MISCELLANEOUS |  |
| :--- | :--- | ---: |
| Qty | Description | Part \# |
| $\square 1$ PC Board | 517011 |  |
| $\square 28$ Switch Slide DPDT | 541023 |  |
| $\square 1$ Front Panel | 614404 |  |
| $\square 1$ | Case | 623004 |
| $\square 2$ | Lockwasher, Binding Post | 6250311 W |
| $\square 2$ | Nut, Binding Post | 625031 HN |
| $\square 2$ | Binding Post Green | 625033 |
| $\square 4$ | Screw 2mm x 17mm Philips | 641103 |
| $\square 4$ | Lockwasher \#4 External | 646405 |
| $\square 4$ Rubber Feet | 662023 |  |

