

# ACL MODEL #390

## CALIBRATION INSTRUCTIONS

### Equipment Needed:

- Resistance decade box with 1% accuracy resistors – ACL uses a calibration box # 7100.SRM110.KA.T.
- Insulated Screwdriver for adjustment
- Philips hand screwdriver to open the case

### Operation:

- Make sure calibration box is grounded.

### Test Procedure:

- Place the ACL 390 meter onto the electrodes of the calibration box.
- Each resistance value has to be selected and compared to the reading of the instrument while pressing the test button of the ACL 390
- In case the values do not match, make the following adjustment

### Adjusting:

1. Remove the back cover of the housing by unscrewing the four screws on the back.
2. Connect the ACL 390 to the calibration box.
3. Select decade  $10^{11} \Omega$  with the rotary switch (3). Adjust the upper pot (P1) with the insulated screwdriver while keeping the test button pressed, until both values match.
4. Select span 3,  $2 \times 10^6 \Omega$  (1) (2). Adjust the lower pot (P2) until both values match.
5. When a change is made repeat steps to approximate the tolerances to zero.
6. After successful adjustment verify all values again.

LED -Display	Selector	Right rotary switch	Resistor
$< 10^3$	Right	Random, button ZERO pressed	$< 1 \Omega$
$10^3$	Right	$10^3$	1 k $\Omega$
$10^4$	Right	$10^4$	10k $\Omega$
$10^5$	Right	$10^5$	100k $\Omega$
$10^6$	Right	$10^6$	1M $\Omega$
$10^7$	Right	$10^7$	10M $\Omega$
$10^8$	Right	$10^8$	100M $\Omega$
$10^9$	Right	$10^9$	1G $\Omega$
$10^{10}$	Right	$10^{10}$	10G $\Omega$
$10^{11}$	Right	$10^{11}$	100G $\Omega$
$10^{12}$	Right	$10^{12}$	1T $\Omega$
$> 10^{12}$	Right	$\infty$	infinite

LED -Display	Selector	Left rotary switch	Resistor
$10^6$	Left	$1,8 \times 10^6$	1,8 M $\Omega$
$10^6$ and $10^7$	Left	$3,2 \times 10^6$	3,2 M $\Omega$
$10^7$	Left	$5,6 \times 10^6$	5,6 M $\Omega$