

APPLICATION NOTE 11



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Understanding the Voltage Rating on Kurth Electronic Test and Trace Units



High on the list of priorities for companies doing installation and maintenance of communication facilities is user safety, and safety has featured strongly in the latest round of products from Kurth Electronic.

Stray Voltages

Surviving accidental contact with high voltages: With a high voltage rating the Kurth 300, 700 and 800 series of testers will survive contact with AC power, repeater voltage and powered communication cables. Such voltages normally would at least damage other small testers and at

worst cause arcing while in the user's hand.

| Test Unit Voltage Rating Specifications | | | | 30-second rating | |
|---|--------------|-----|------|------------------|-------|
| MODEL | Mode: | OFF | DATA | CONT | STONE |
| KE300 | DC volts | | | 120 | 120 |
| | AC volts RMS | | | 120 | 120 |
| KE720 ¹ | DC volts | | 120 | 120 | 500 |
| | AC volts RMS | | 120 | 120 | 500 |
| KE800 | DC volts | | | 120 | 400 |
| | AC volts RMS | | | 120 | 400 |
| ¹ Visual indication at 90 volts DC, audible alert at 100 volts DC. | | | | | |

High voltage warning: It isn't always enough to protect the tester from damage -- the KE700 testers also have a high voltage warning light to alert the user to the presence of an unexpected hazard. One light comes on for normal telephone voltages and a second light if the voltage exceeds 90 Vdc. At 100 V a warning tone sounds.



Safety-rated test clips can be used: The 4 mm 'banana' plugs on the test leads of the 700 and 800 testers are compatible with a wide range of safety-rated clips. Many standard test clips leave exposed metal when attached to the tested circuit. These clips are commonly available because they are widely used in the electrical test industry.