



Telephone Line Diagnostic Table

Telephone / Line Number >							
Loop Current & Talk Battery							
1	Loop Current DCma Ideal Range (23 to 35DCma)						
2	On-Hook DCV Ideal Range (24 to 50VDC)						
3	Off-Hook DCV Ideal Range (5 to 15VDC)						
AC Ring Voltage & Current							
4	AC Ring Voltage (>75VACRMS)						
5	AC Ring Current Ideal Range (8.5 to 45maAC)						
Induced AC / Longitudinal Imbalance							
6	On-Hook ACV-Tip to Ring (<.5VAC)						
7	On-Hook ACV-Tip to Ground (<.5VAC)						
8	On-Hook ACV-Ring to Ground (<.5VAC)						

The only way to diagnose many problems on phone lines is to take voltage and current measurements.

When you have a problem, taking these measurements on all of the phone lines at a premise, and comparing the results to those at other premises with no problems, the cause of the problem should jump out at you. Always take measurements at premises where you aren't having problems first, so you have a basis of comparison, and a comfort level with your measurements. **Never use a tester for the first time at a premise with a problem!**

If you ask the telco to take these measurements, they'll simply say "they're fine". They don't care and they don't have to. It's your customers' and your problem.

Once you have the measurements that point to the cause of the symptoms, going to battle with the phone company is a lot easier. Even with these measurements, you may have to escalate the case of trouble, since the repair people at the company may not know what these measurements mean. If you don't want to battle the phone company, we sell devices that can solve many of these issues.



Scan the QR Code to see our articles, videos and related products, or to print more copies of this chart.

