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## Why You Should Invest In The PR570 “POWERITE II” Variable Isolation Transformer & Safety Analyzer

The first step in investing in test equipment is to identify the specific needs you want that piece of equipment to fulfill. Once the needs are identified, it's time to compare features, ensuring that the equipment you purchase meets the needs you identified. In addition to features, be sure to not overlook these important factors: product quality, warranty, and level of after-sale support you will receive with the equipment.

The PR570 gives you six essential features in one package that save you time and money. The first two features are the variable, isolated output. Many isolation transformers have variable outputs but not all variable transformers are isolated. Be sure to ask the seller of the product if the output is isolated. A high quality variable isolated output will have two physical transformers, one for isolation and one for variable output. The PR570 incorporates two high quality transformers. The benefits of having both of these features are:

- **Isolated Output**

An isolation transformer protects both the technician and their test equipment from electrical shock. It does this by breaking the DC connection between the AC line and chassis ground. This allows the chassis ground to float to the same potential as test equipment ground. Not only does this protect the technician but it also prevents costly test equipment repairs.

- **Variable AC Output**

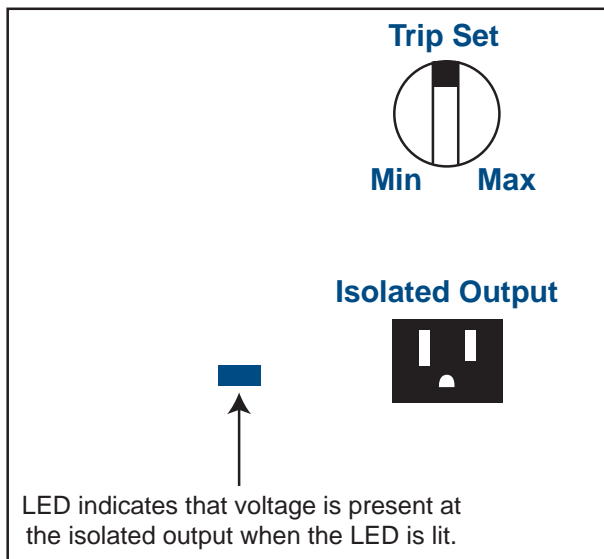
This feature allows the user to vary the ACV from 0VAC - 150VAC. Lowering the

output voltage to 20 VAC on a Switch Mode Power Supply (SMPS) will allow a technician to safely troubleshoot the bridge rectifier. At this low voltage the switching transistor does not receive enough startup voltage to turn on and you can safely troubleshoot. Raising the output voltage above normal can sometimes sweat out intermittent problems in the power supply. Adjusting the voltage up and down enables you to quickly check the power supply's ability to regulate.

Most combination Variable/Isolated Output transformers have only these first two features. However, the PR570 combines several additional features in the same package to aid in troubleshooting and enable you to put more money in your pocket. These additional features were added based on feedback from technicians.

- **Current Trip**

The current trip acts as a circuit breaker for the isolated output on the PR570. This feature enables you to limit the amount of current the PR570 will supply to the chassis being worked on. Use this trip set as a troubleshooting aid by setting the trip set lower than the device line fuse. By doing this your trip set will save parts in the device by cutting the power when an increase in current is sensed. **This minimizes expensive parts damage and saves you time that would have been lost due to parts replacement!** Fig. 1 shows a diagram of the trip set feature.



*Fig. 1: When the current drawn through the isolated output rises above the level specified by the trip set, power is removed from the isolated output. When the power is removed the red LED turns off.*

#### • Hot Chassis Test

This test is designed to identify whether your chassis ground is hot or cold and is performed without applying power to the device under test. The hot chassis test is a good troubleshooting aid when there's no schematic available and you want to make sure you are on the proper ground to make your measurements. Hooking your probe to the wrong ground while using an isolation transformer will not cause any damage but it will result in incorrect readings.

#### • Dual Digital Displays

The PR570 allows you to monitor voltage and current or power at the same time. At the request of technicians Sencore added a simultaneous display. This feature becomes a useful aid when troubleshooting SMPS. It allows you to lower the voltage to the supply and check the current draw at the same time. Power can also be monitored instead of current, which is selectable with the CURRENT/POWER switch.

#### • Receptacle Test

The PR570 provides you with an exclusive AC outlet test to ensure correct outlet wiring before plugging in the device. It is very important for the AC outlet to be properly wired when performing a safety leakage check. If incorrectly wired, your readings may become erratic and you could be led to believe the device under test is safe when in fact it is not. The receptacle test will also tell you when the AC from the outlet is low, which can lead to intermittent problems with consumer products such as televisions. This feature is especially important when doing service work in the field.

#### • Safety Leakage Tester

The PR570 contains a safety leakage test that makes it very easy for the technician to ensure that the product being serviced does not present a hazard to the technician or customer. It does this by checking for stray AC current leakage on the exposed metal parts of the product. If more than 500uA (the UL standard) is detected on the chassis, a problem exists in the product. This product is a safety hazard to the customer. The service center could be liable for any bodily damage that occurs as a result of the unsafe condition. To prevent lawsuits, a safety leakage check should be done and documented on every piece of equipment that is serviced.

The PR570 Powerite II Variable Isolation Transformer and Safety Analyzer is, dollar for dollar, the best test equipment in its category. It will improve your efficiency and add money to your bottom line. **SN**

### Using The Safety Leakage Test As A Profit Builder

Many of Sencore's customers use the PR570 to add profit to their business. Charging a small fee for each safety leakage test that is performed can generate additional income. Take a quick look at how fast the profits can add up using the safety leakage check to build revenue.

#### Example:

3 technicians, 5 repairs per day, \$3 for safety leakage test=  
 $\$45 \text{ a day} \times 5 \text{ days per week} = \$225 \text{ per week} \times 52 \text{ weeks} =$   
 $\$11,700 \text{ in extra profit every year!}$



Call Sencore at **1-800-SENCORE (736-2673)** today to order your PR570 or for additional information.