

Test Programming In Your Product Language

Creating a test program can be time-consuming and complex if you have to search for the lowest switching address in your program. To simplify creating test programs, you can take advantage of two methods. The first method is a standard feature of all of our systems using Product Language Look-up (PLL). The second method uses our optional Automatic Program Generator. The method best for you depends on the complexity of your schematics.

PLL allows you to enter test instructions in Unit Under Test (UUT) terminology (such as J101-PIN A) rather than the analyzer address. The on-the-fly translation substitutes the correct analyzer address for the test. Figure 1 shows this method.

FIG 1 Method One, Using Product Language Look-up

```
F 500V >100M .2S .1T
C 1A <2R .02S
ENB DTB,CES,DOF,VCN
F-P2030-A
C-P2111-J
C-P2200-U
C-J6750-123
F-P4020-B
C-P5112-H
C-P1230-X
[END OF TEST
```

The second method uses DIT-MCO's optional Automatic Program Generator (APG) software program. This eliminates the need to determine the lowest address for the insulation test. APG automatically designates the insulation (F) test to the lowest address in the string (net). This saves much time when programming from complex schematics since you do not need to continually cross reference between the UUT and DIT-MCO addressing. The node-list can also include parameters and any mode or file directives required. A node-list for the previous example could look as shown on the following page. The start of each net is identified by the asterick.



FIG 2 Method Two, Node-list Paired With Automatic Program Generator

```
%  
C 1A <5R .01S  
F 500V >100M .2S .1T  
ENB DTB DOF CES VCN  
%  
*P2200-U  
P2111-J  
P2030-A  
J6750-123  
*P1230-X  
P5112-H  
P4020-B  
%[END OF TEST
```

APG could then compile the node-list into an executable test file.

Next, the node-list could be processed and run using “SYS” calls within DIT-MCO’s test process control software via a small program as shown below:

```
[TEST PROGRAM CREATED AUTOMATICALLY USING "SYS" CALL & APG WITH  
[NODE-LIST.  
[STP  
SYS,APG WL=BVM.WL ER=ERRORLOG.LOG TP=BVM.RO  
CNP,BVM
```

This program automatically created and ran “BVM” as shown below:

```
C 1A <5R .01S  
F 500V >100M .2S .1T  
ENB DTB DOF CES VCN  
X002 P2200-U  
C001 P2111-J  
C000 P2030-A  
C003 J6750-123  
F000 P2030-A  
X006 P1230-X  
C005 P5112-H  
C004 P4020-B  
F004 P4020-B  
[END OF TEST
```

As illustrated in the above example, only the lowest addresses within each string (net) had an insulation test assigned to it.

