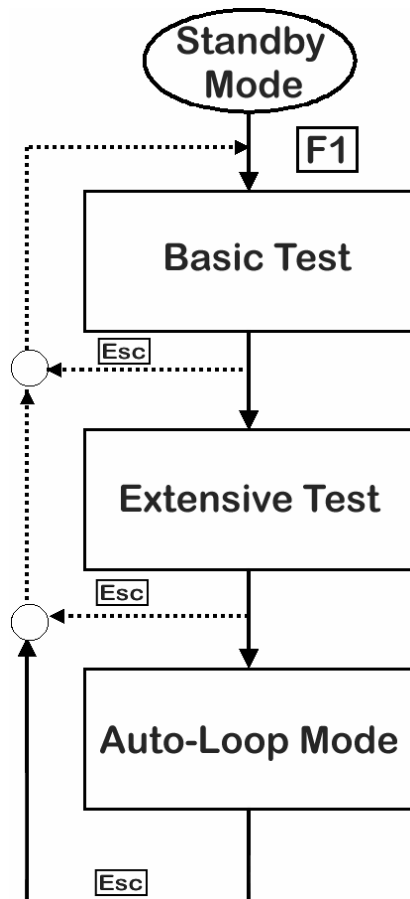


## QUICK SETUP

If you hate to read manuals and cannot wait to use your RAMCHECK, here is a quick short cut for you:

- Connect the power supply to RAMCHECK and to the AC line. To test 168-pin modules, you must remove any mounted adapter (including the DDR adapter).
- Turn RAMCHECK on and press F3 to see the DEMO PROGRAM. This program should help you discover RAMCHECK's basic functions.
- Insert and remove any module only when the MODULE POWER RED LED is off.
- To test a module, insert it (notice the indication for Pin 1) into the 168-pin DIMM socket and press F1. See overview of test phase below.



You start the test from **Standby Mode**. Pressing the Esc key during or after any of the following test phases will return RAMCHECK to Standby Mode.

The initial test, called **BASIC Test**, looks for basic wiring, addressing, and data bit defects. It lasts a few seconds depending on module size. This test is sufficient for most testing needs.

During the **EXTENSIVE Test**, RAMCHECK subjects the devices to a variety of tests (voltage bounce, march, voltage cycling, etc). This test offers a more rigorous procedure than BASIC Test.

During **AUTO-LOOP Mode**, your module is continuously burned-in and subjected to varying test patterns. This test phase will be active until an error is reached, or you manually stop the test by pressing Esc.

- Use F4 from STANDBY to view the detailed Test Log of your last test.
- Use **ESC** to terminate the test and return to Standby Mode during any test phase.
- The enclosed CD includes the RAMCHECK Communications program. Use this program to download updated versions of the RAMCHECK firmware from [www.innoventions.com](http://www.innoventions.com), and for printing and logging test results (see Section 6).
- Please remember to upgrade RAMCHECK's firmware every few months.
- To learn more about DDR operation, please visit our DDR manual addendum on-line at [www.innoventions.com/ramcheck/rc\\_man.htm](http://www.innoventions.com/ramcheck/rc_man.htm).

**This manual is applicable to RAMCHECK/RAMCHECK DDR/RAMCHECK DDR2 units with FIRMWARE versions 2.33 and up. RAMCHECK's program version is displayed when RAMCHECK is turned on.  
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Please visit our web site ([www.innoventions.com](http://www.innoventions.com)) for up-to-date manual information, including addendums for newly released products.

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## SAFETY PRECAUTIONS

- **WARNING:** This instrument and the devices under test warm up significantly during operation due to the high data rate of memory accesses. Keep away from combustible materials, in a well-ventilated and supervised area within an ambient temperature of 0°C to 27°C. Do not set it on top of other high temperature equipment. Make sure that tested modules are free from combustible materials and residues.
- Never remove or insert a module when the Module Power is ON as indicated by the **red** LED.
- Please remember to turn RAMCHECK OFF before inserting or removing any optional test adapter.
- You must remove any adapter (including the DDR adapter) in order to test 168-pin DIMM modules on RAMCHECK's test socket. Please let the unit cool down prior to removing the adapter.
- The AC adapter is UL listed for indoor use only. Do not subject the product or adapter to rain or to excessive humidity. Never permit moisture to enter the interior of this instrument.
- The ZIF sockets on our products are expensive components. Never permit moisture to enter the interior of these sockets. Never use excessive force to insert a module into the ZIF socket.
- Never submit this instrument to a severe shock.
- Make sure that no conductive debris falls into any of the exposed sockets. It can cause a short circuit that will disable the unit.

## ONE YEAR LIMITED WARRANTY

RAMCHECK is warranted in entirety against any defects of material or workmanship which may develop for any reason whatsoever, **except abuse and normal wear and tear of external test sockets**, within a period of ONE YEAR following the date of purchase by the original purchaser. If your RAMCHECK should become defective within the warranty period, INNOVENTIONS, Inc. will repair it or elect to replace it free of charge. For warranty service, the purchaser or user must first call to obtain a Return Authorization Number as well as instructions on where to send the defective product, postage prepaid and insured, along with a return shipping charge of \$15 and a proof of purchase.

Except as stated above, INNOVENTIONS makes no warranty or representation, either expressed or implied, with respect to this product, its quality, performance, merchantability, or fitness for any particular purpose.

**INNOVENTIONS hereby specifically acknowledges the scientific fact that memory testers cannot achieve exhaustive tests (that is, 100% accuracy) due to the virtually unlimited possibilities of data combinations which may be stored inside a memory device. Therefore, while INNOVENTIONS continuously strives to improve its test algorithms, it cannot guarantee 100% accuracy of the test results. A detailed discussion of RAMCHECK's accuracy is available on-line at:**

*[www.innoventions.com/faq\\_test\\_accuracy.htm](http://www.innoventions.com/faq_test_accuracy.htm)*

In no event will INNOVENTIONS be liable for direct, indirect, special, incidental, or consequential damages resulting from any defect in this product. Some states do not allow limitations on how long an implied warranty lasts, or exclusion or limitation of incidental or consequential damages, so exclusions or limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other legal rights, which vary, from state to state.

INNOVENTIONS continuously develops new test adapters to support new memory types, however, in view of the rapid emergence of new technologies, INNOVENTIONS cannot guarantee that the current product will be able to support all future memory technology.

**Product operation and specifications are subject to change without prior notice.**

The License Agreement for the PC software, which interfaces RAMCHECK and the Internet upgrades for RAMCHECK's firmware appears in Appendix A.

# RAMCHECK®

## Base Tester Overview (with optional 168-pin SDRAM)

