

Alliance 2G Frequently Asked Questions

This document answers frequently asked questions about Teradyne's second generation of User Power supplies for their 228X and TestStation In-Circuit Test systems.

Q: What are the Alliance 2G Supplies?

A: The Alliance 2G power supplies are replacing the original Alliance I, II, and III power supplies that are configured in the TestStation, LH, LX, TSR, and Duo (P/N 9004002002 0-7V, 9004002502 0-20V, and 904002602 0-60V).

Q: How do the new Alliance 2G supplies compare with original Alliance Supplies?

A: The Alliance 2G power supplies are designed to be program and fixture compatible with the original Alliance supplies. The Alliance 2G supplies have two modes of operation with regard to execution speed: standard mode and enhanced mode. Standard mode is the default mode of operation when the Alliance 2G supplies are installed on testers running software versions prior to 6.4.0. Standard mode was designed to closely match the execution speed of the original Alliance supplies and was created to maintain backward compatibility with existing customer applications. The primary issue was in regard to how quickly supplies defined in a sequence ramp up with respect to each other. This issue is discussed in more detail later in this document. The Enhanced mode of operation runs the Alliance 2G supplies at a faster execution speed and it is the default mode when running on the latest version of TestStation system software. Operators can set the execution speed back to Standard mode if they discover that the faster execution speeds cause an application to fail.

Q: How much faster are the Alliance 2G supplies?

A: Users will experience improved throughput in the execution speeds for the new Alliance 2G power supplies compared to the original Alliance power supplies. The faster performance is visible to the user in two areas: initializing the power supplies when first entering the run time and when executing power supply sequencing commands.

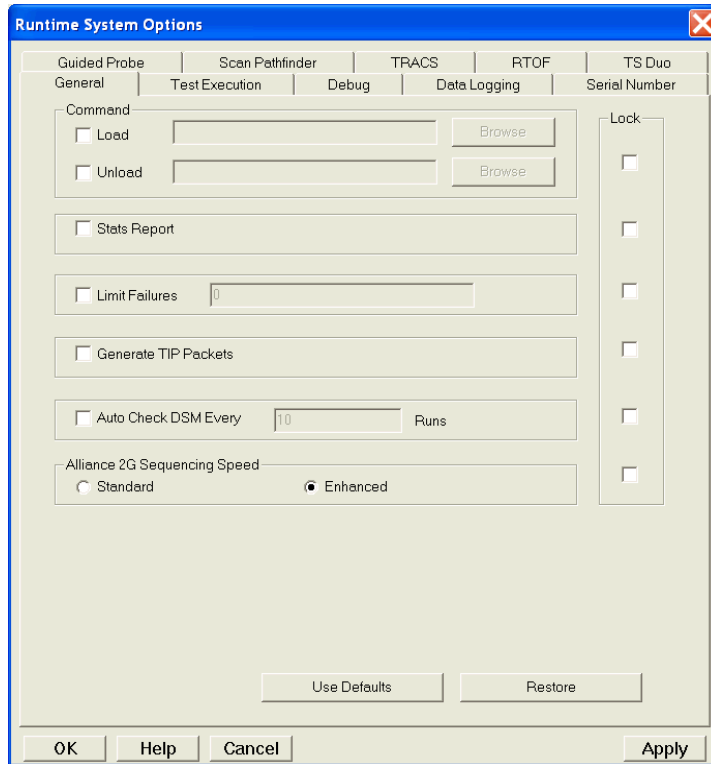
For a tester configured with 7 Alliance 2G power supplies in a single rack, the user can expect the following:

- 2X improvement of the Alliance 2G power supply initialization time (including sequence definition) during boot compared to the original Alliance power supply initialization time. The power supply initialization time improved to approximately 10 seconds from the original 23 seconds.
- A 15% execution speed throughput improvement when operating in Standard Mode or a 65% execution speed throughput improvement when using the Enhanced Mode for 3 power supply sequences in a single test run. Execution time for each test run improved from 2.3 seconds to 1.9 seconds in Standard Mode and the execution time was twice as fast in Enhanced Mode as each test run improved from 2.3 seconds to 0.8 seconds.

Q. Are there any User Interface changes I need to know about?

A: There are small changes to the user interface for Alliance 2G power supplies. "Alliance 2G Sequencing Speed" has two options that can be selected for the execution speed of "Standard" or "Enhanced." Standard execution is the default mode of operation for testers running older

versions of software. Enhanced mode is the default when running on TestStation test systems that have the latest software revision installed.



Runtime System Options showing Alliance 2G Standard/Enhanced Sequencing Speed Options

The Hardware Report generated in the system development software will list the quantity and type of Alliance power supplies installed in the tester.

Q: Can I put Alliance 2G supplies in my TestStation UltraPin I or UltraPin II tester?

A: The Alliance 2G supplies can be installed in UltraPin I or UltraPin II test systems but require the upgrade to the Alliance 2G Rack Assembly at the same time. The individual Alliance 2G power supplies cannot be mixed with the original Alliance power supplies in the same rack. An additional Alliance 2G power supply rack needs to be purchased for the Alliance 2G power supplies to be installed.

Q: Can I upgrade my 228x, TS8x, Stinger, Versa, Geneva or other GenRad or Teradyne test systems that use the Alliance supplies to the Alliance 2G?

A: Teradyne is not supporting upgrading these older model machines with the Alliance 2G. There is no migration path or testing that has been completed on how the rack and supplies work in these older machines.

Q: Can I mix Alliance and Alliance 2G supplies in the same rack?

A: The rack and controller card between the original Alliance and Alliance 2G are unique and therefore the individual supplies cannot be mixed in the same rack. An Alliance 2G supply rack is necessary for the installation of the new Alliance 2G supplies. Only Alliance 2G power supplies can be placed in the Alliance 2G rack.

Q: Will I have to change my existing test programs or fixtures?

A: No, the Alliance 2G power supplies are compatible with existing test programs and fixtures.

Q: What software versions support the Alliance 2G power supplies?

A: All existing Teradyne software versions will support the Alliance 2G power supplies. Older versions of software can only run the Alliance 2G supplies in standard mode.

Q: Do I need a Software Support Contract to upgrade to the Alliance 2G Supplies?

A: No, but to take advantage of the enhanced performance characteristics of the Alliance 2G supplies, testers must have version 6.4.0 or later installed on their tester.

Q: What are the part numbers for the Alliance 2G supplies and how do I order them?

A: You can order the Alliance 2G power supplies directly from Teradyne. Below you will find the part numbers, list prices, and descriptions of the various Alliance 2G power supply options. Please be advised that all prices are subject to change:

ALLIANCE 2G Power Supply Options for TestStation, LH, LX, TSR, and Duo

NOTE: A power supply rack is required for each set of 7 power supplies.

P/N 601-960-53**ALLIANCE 2G 0-7V@15A****NOTES:**

- Alliance 2G 0-7V power supplies cannot be connected to PS-11,12 or 13.
- Alliance 2G 0-7V power supplies can only be connected to PS-7, 8, 9, or 10 for TestStation, TestStation LX, TestStation LH, or TSR.

P/N 601-960-63**ALLIANCE 2G 0-20V@8A****NOTES:**

- The Alliance 2G 0-20V power supplies cannot be connected to PS-11, 12, or 13.
- Alliance 2G 0-20V power supplies can only be connected to PS01 through PS10 for TestStation, TestStation LX, TestStation LH, or TSR.

P/N 601-960-73**ALLIANCE 2G 0-60V@2.5A****NOTES:**

- If PS-11, 12 or 13 is powered by an Alliance power supply, P/N 9003080000 (CABLE, GROUP 7, UPS ADAPTOR) is required and will be added to the order at no charge.
- Alliance 2G 0-60V power supplies can be connected to PS-1 through PS13 for TestStation, TestStation LX, TestStation LH, or TSR.

OPTIONAL: An additional power supply rack to be added to a TestStation, TestStation LX, or TSR.

NOTES:

- Rack can hold up to 7 individual supplies.
- Only one additional rack may be added to the tester.
- One rack is included in the base tester.

P/N 614-182-00 ALLIANCE 2G RACK ASSEMBLY, TS, LX

P/N 093-262-00 ALLIANCE 2G RACK ASSEMBLY, TSR

Q: How can I tell if the tester has Alliance 2G or original Alliance supplies?

A: The quantity and type of installed Alliance power supplies will be listed in the Hardware Report generated in the TestStation development software. The new Alliance 2G power supplies will have black thumbscrews on the faceplate.

Q: Are there any changes to the System Test or Diagnostic Programs?

A: There are no changes to the System Test or Diagnostic Programs for the Alliance 2G power supplies. The same System Test Fixture and System Load Box are used for testing both the original Alliance supplies and the Alliance 2G supplies.

Q: What if I want to buy a new Alliance Power supply for my existing system? How long will Teradyne be supporting the power supply?

A: The original Alliance power supplies will be in active production until January 31, 2012 and then an end-of-production notice will be generated for the product. Teradyne will support the original Alliance Power supply for a minimum of 5 years after active production ends and then with “best commercial efforts” thereafter.