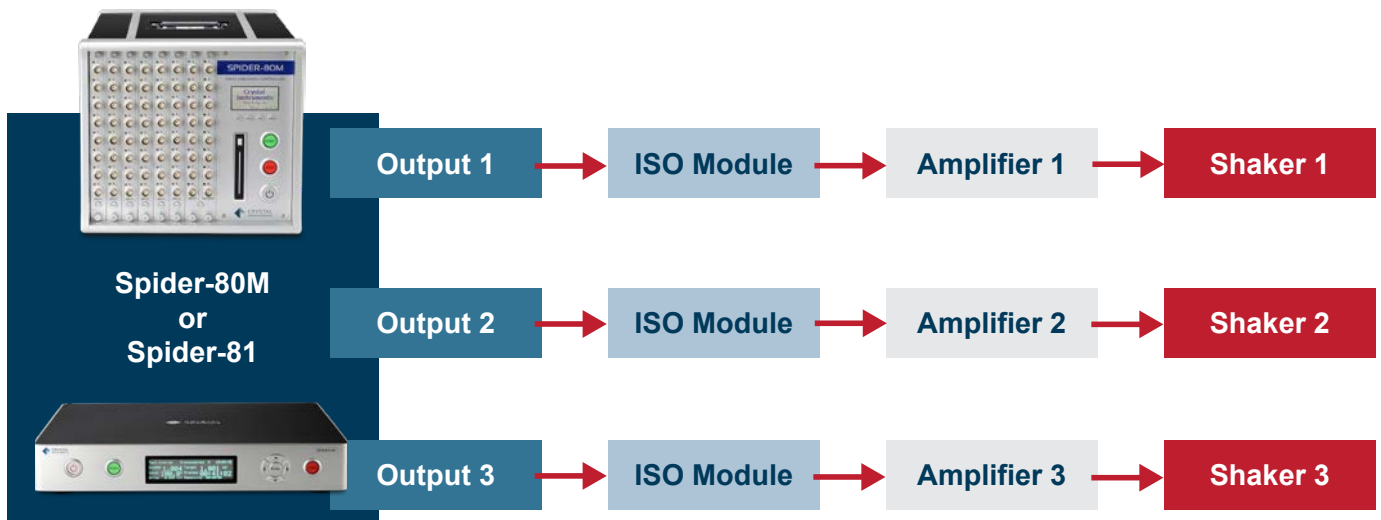


Output Ground Isolator

Application Note 076



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The output ground isolator is the most user-friendly solution for controlling multiple shakers while simultaneously improving accuracy of control and ensuring safe operation.

With the addition of the output ground isolator to the Spider-80M or Spider-81, there are no additional steps required for the customer to ensure safe and accurate operation when a Spider system is being used to control independent amplifiers and shakers. Previously, users were required to link the amplifier grounds together with a specific type of cable and then connect them to the Earth's ground, but users did not always follow these instructions.

Now we have a solution that requires no additional steps. The electrical isolation provided by the output ground isolator greatly reduces ground loops and common-mode voltages caused by the single-ended output channels. In small amounts the lack of proper grounding may only introduce control error, but in large amounts it can irreversibly damage the shakers. This means that the output ground isolator reduces both the control error and the possibility of damaging the shakers. It is able to do this without requiring the user to do anything, which makes it an ideal solution for customers who want minimum complexity without sacrificing any features.

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