

Optimizing High-Power Digital Injection Using the Shively Labs Fine-Matching Transformer

The Objective:

(Figure 1) The analog and digital signals combine with a high degree of isolation.

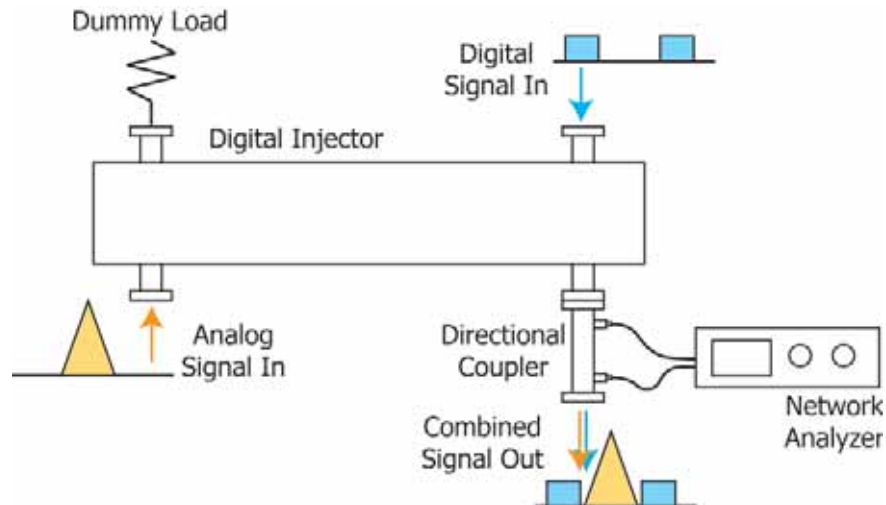


Figure 1. The Objective

The Problem:

(Figure 2) Some manufacturers' injectors do not provide enough digital-to-analog or analog-to-digital isolation. The output signal is distorted, as shown by the red arrows.

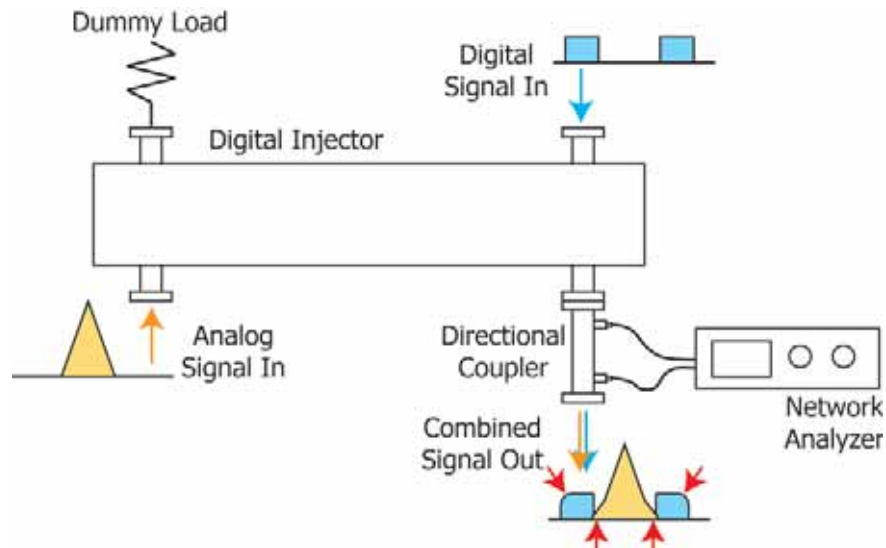


Figure 2. The Problem

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A Division of Howell Laboratories, Inc., P. O. Box 389, Bridgton, Maine 04009 USA
 (207) 647-3327 1-888-SHIVELY Fax: (207)647-8273
 An Employee-Owned Company

www.shively.com
sales@shively.com
 Certified to ISO-9001:2000

The Solution:

(Figure 3) Simply install a Shively Labs fine-matching transformer between the injector and the dummy load.
Adjust the transformer to correct the output signal!

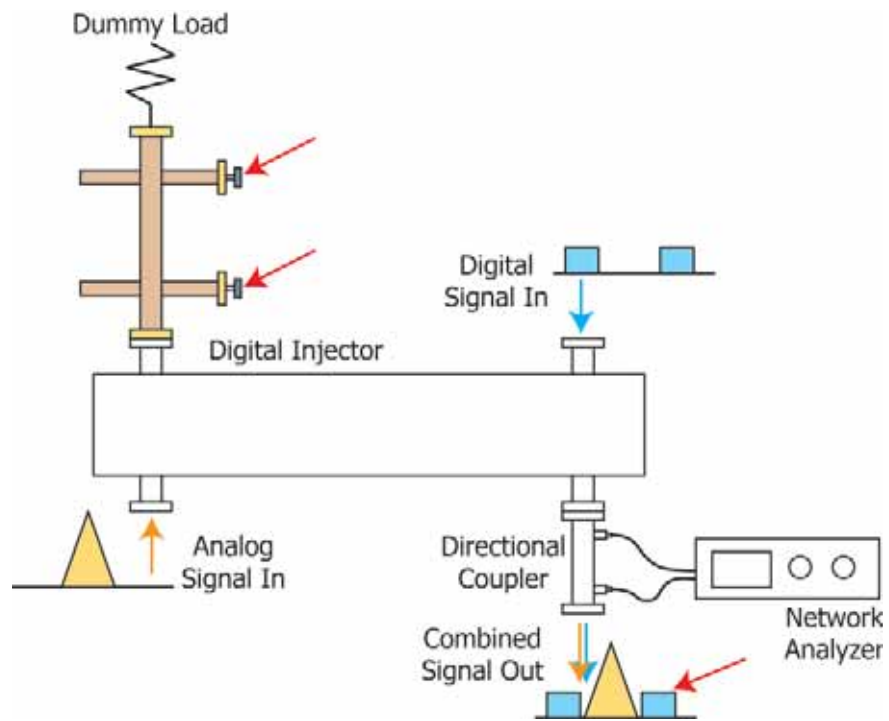


Figure 3. The Solution