

MESSAGE FROM



## SERVICE INFORMATION

# CONTROLS

**Date:** 11-02-04

**Ref. No:** NS-21-04

**To:** Service Manual Holders  
National, International and Canada  
Field Sales and Waynesboro Personnel

**Subject: Calibrating an Analog Output on the 32 channel analog board**

**Tools Needed: Quality, Calibrated Meter and Quantum™ Compressor Control manuals, S90-101 O/APR 2004 and S90-010 M/APR 2004.**

The current 32 channel analog board used in the Quantum Control Panel today provides an output that ranges approximately 0-25mA. Most devices used with the Quantum controller utilize a range of 4-20mA.

To calibrate the 0-25mA output to a precise 4-20mA output, follow the step by step procedure found on pages 73 & 74 of manual S90-010 O/APR 2004 and the drawings found on pages 82 or 111 in manual S90-010 M/APR 2004.

This calibration procedure is easy to do in the field and allows for a precise output of 4-20mA from the analog board or as received by the end device for every application. This is regardless of variables such as wire distance between the panel and the end device or conversion of the signal from milliamps to volts (4-20mA to 1-5VDC).

Common uses for the analog outputs are PID control such as the EZ-Cool™ LIOC (liquid injection oil cooling) valve, transmitting input channel values, such as slide valve position and VFD (variable frequency drive) control of the compressor drive or condenser fan motor.

**You may obtain more information on the Quantum Controller Panel by visiting [www.frickcold.com](http://www.frickcold.com)**

Please feel free to contact me direct at 717-765-2472 if you have any questions regarding this letter or any other controls related issue you may have.

Sincerely,

A handwritten signature in black ink that reads "John C. Cosner".

John C. Cosner  
Product Support Specialist  
YORK Refrigeration Systems / Frick Controls  
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***You can't beat the system when it's all FRICK***

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