# TECHNICAL NOTE TNPC05

## Title: IAMA reverse slope

## Product(s): IAMA

**Problem Description:** No problems, see below.

**Addition Features:** Reverse slope scaling was added to the IAMA3535.

**Feature Implementation:** Unit Date Code 0403

**Unit Performance:** The new IAMA3535 will function as originally designed, converting and/or scaling analog inputs and outputs for system requirements or just for isolation between two devices. The added reverse slope scaling allows the unit to convert one of the available factory/scaled inputs to one of the available factory/scaled outputs with a reverse action. If the input increases the output would decrease and visa versa.

### ADDITIONAL NOTE:

The IAMA6262 was designed with the reverse slope feature. Date code for this unit is not critical.

When scaling for reverse slope, refer to the IAMA data sheet "4.0 OUTPUT SCALING USING FIELD CONFIGURATION" Interpretation of the following two steps in the scaling procedure is critical.

Step 4.11 – Adjust the input signal until the desired * minimum output level is displayed on the volt or current meter.

Remembering the final result we need is a reverse slope, this means that when Step 4.11 request the minimum output level, it will actually be the high end output value.

Step 4.13 – Adjust the input signal until the desired * maximum output level is displayed on the volt or current meter.

Again, remembering the final result we need is a reverse slope, this means that when Step 4.13 request the maximum output level, it will actually be the low end output value.

An example of the above two statements follows:

With 0-10 VDC analog input and a reversed slope 4-20 mA output, the final result is 0 VDC input should drive 20 mA output, while a 10VDC input will equal a 4 mA output.

When "Step 4.11" says "adjust the input signal until the desired * minimum output level is displayed", you will adjust input signal until 20 mA appears on output current meter.

Conversely, when "Step 4.13" says "adjust the input signal until the desired * maximum output level is displayed", you will adjust input signal until 4 mA appears on output current meter.