TECHNICAL BULLETIN

Part #: 026-4205 Revision 1 Date: 07/10/2001

COMPUTER PROCESS CONTROLS

8IO Board Network Addressing Changes

Overview

This technical bulletin is to inform customers and service personnel of the new release of 8IO firmware version 1.01 and the changes to the way the network addresses are configured for this new revision.

Instructions in this technical bulletin take precedence over **all CPC technical documentation produced before this bulletin's date of release.** The new information in this technical bulletin will be included in future revisions of the REFLECS and Einstein technical manuals, as well as an updated version of the 8IO Installation Guide (**P/N 026-2001**). Refer to the appropriate REFLECS or Einstein manual for information on RS485 I/O Network (or COM A and D Network) setup instructions and information.

How to Tell If Your 8IO Is a New Revision

To determine if your 8IO board is affected by the changes outlined in this technical bulletin, locate the white version label on the microchip as shown in Figure 1. If this version label reads any number above 1.0, the changes outlined in this technical bulletin apply to your 8IO board.

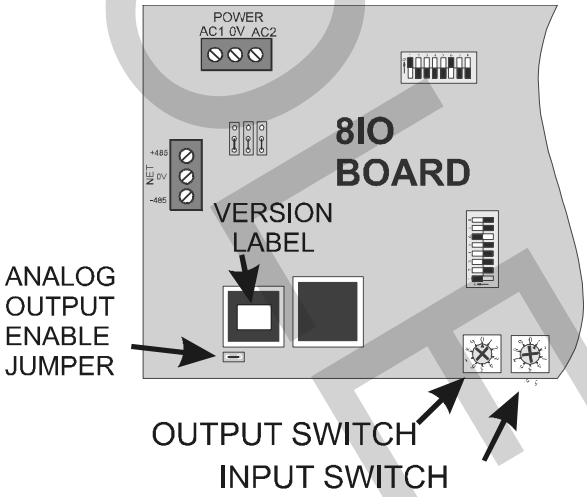

Figure 1- 8IO Switch,Jumper, and Version Label Locations

Changes To Board Network Addressing

The 8IO Combination Input/Output Board has components that mimic the characteristics of a 16AI Analog Input Board, an 8RO Relay Output Board, and a 4AO Analog Output Board. To set this board up on a network, each of these components must be given a network address, or "board number."

In the previous version of 8IO firmware (v. 1.0), the input board (16AI) number and output board (8RO) number were set using rotary switches. Both the input and output board could be numbered from 1 to 9. The 4AO component of the board was fixed at board #1, and could not be renum-

bered, but could be removed entirely from the network by removing the analog output enable jumper.

The following changes have been made to 8IO board addressing:

Maximum Input and Output Board Number Increased to Ten

Previously, setting the input or output board numbering rotary switch to "0" would default to board number "1." The new 8IO version will interpret switch setting "0" as board number 10. This increases the maximum board number from 9 to 10. This effectively means you may now have up to 10 8IO boards on the same RS485 network.

4AO Board Number Is Now Set By The Output Board Numbering Switch

In firmware version 1.0, the 4AO portion of the board was fixed at board number "1," which effectively meant you could only have one 8IO on the network with enabled analog outputs. The new 8IO revision now uses the rotary **output switch** (see *Figure 1*) to number both the 8RO and 4AO portions of the board. This means the 8RO and 4AO portions of the 8IO board will always share the same board number, which will allow analog outputs to be enabled on any or all 8IOs on the network.

If you are not using analog outputs on an 8IO, the Analog Output Enable Jumper (*Figure 1*) still works the same way as it did in the previous firmware version. Removing the jumper removes the 4AO portion of the board from the network, which means it also ignores the output switch setting for purposes of numbering other 4AOs on the network.

For example, if the output switch of an 8IO is set to "4" and the Analog Output Enable Jumper is removed, only the 8RO portion of the 8IO will be numbered "4." A separate 4AO on the network could then use board #4 as its address, because the 8IO is not recognized as a 4AO on the network.