

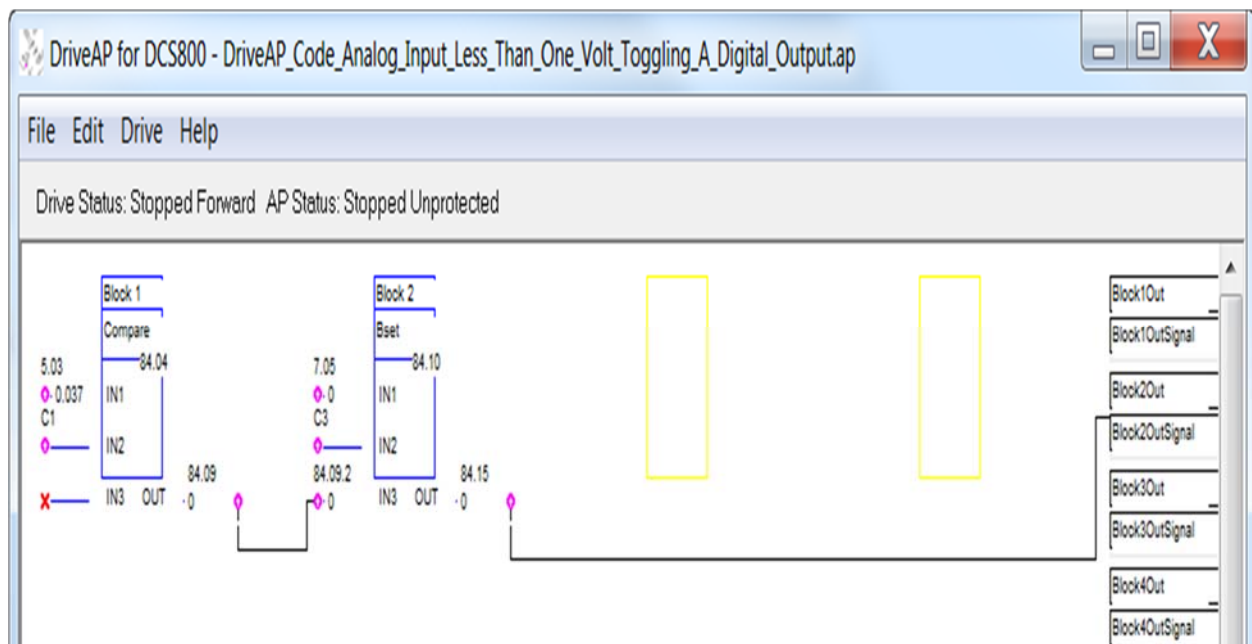
# DCS800: HOW TO TOGGLE A DIGITAL OUTPUT BASED ON AN ANALOG INPUT VOLTAGE VALUE

## Description:

This application notes describes how to toggle or change the state of a digital output based on the voltage value of an analog input.

## Solution:

In this example, it is desired to energize Digital Output 4 when the value Analog Input 1 is below 1 volt. The output (84.09, bit 2) of the Compare block is high when the value of IN1 (5.03, Analog Input 1) is less than the Constant of 1 set on IN2. IN3 of the BSET block is programmed to 84.09 Block 1 Output, bit 2. When 84.09 Block 1 Output, bit 2 is high, the BSET block sets parameter 7.05 DO ControlWord, bit 3, which in turns energizes digital output 4. Once Analog Input 1 is above 1 volt, Digital Output 4 is de-energized.



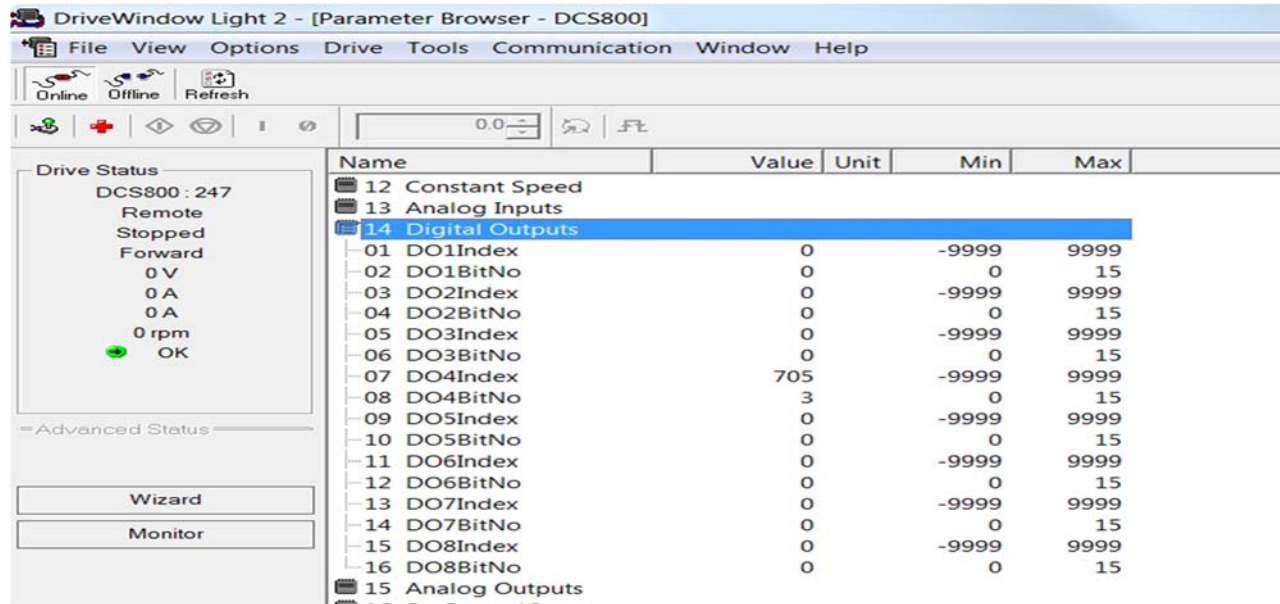
**Figure 1: Screenshot of DriveAP Code**

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In addition, the following parameters in Group 14, Digital Outputs have to be programmed:

14.07, DO4Index: 705

14.08, DO4BitNo: 3



**Figure 2: Screenshot of DriveWindow Light Parameters**

**Documents or other reference material:**

DCS800 Firmware Manual, 3ADW000193, R0701 Rev G

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