PLC210 Lab Exercise 2: The LIM (Limit Test) Instruction

Upon completion of this lab, the student should be able to:

1. Explain the function and operation of the LIM instruction
2. Explain the CIRC term within the LIM instruction
3. Setup a LIM to be true either within or outside of the low & high limits
4. Explain the operation of a ladder routine containing LIM instructions

Download the project Compact_Module_1_EX2_LIM.ACD, go Online and put the CompactLogix into the Run mode to do the following lab.

The I/O addresses in this lab may need to be changed to match the addresses on your hardware trainer. Symbols will be designated in the lab so the steps and questions can be independent of the I/O addresses.

![LIM instructions used in a program.](image-url)

**Figure 1. LIM instructions used in a program.**
1. At Rung 0 - Turn on the Local:1:I.Data.4 input.
   Do any outputs come on immediately?

2. When will Output1 come on?
   When will Output1 shut off?
   Explain:

3. When will Output2 come on?
   When will Output2 shut off?
   Explain:

4. When will Output3 come on?
   When will Output3 shut off?
   Explain:

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