13.0 Immediate Input and Output Instructions

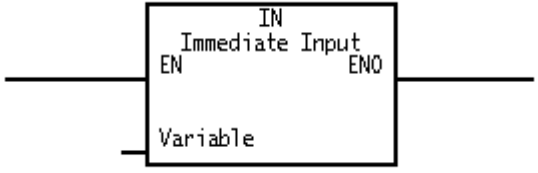
Use the Immediate Input to update the latched value with the most current value of a global input.

Use the Immediate Output instruction to update a global variable's physical location with the current latched value.

These instructions support simple Boolean, integer, or double integer variables.

See the input and output parameter descriptions for each instruction for specific information.

13.1 Immediate Input (IN)



Use the Immediate Input instruction to update the program's latched value corresponding to a global variable with that global variable's current value. Since inputs are latched at the start of a program scan, the IN instruction is useful for gathering data that may have changed since the start of a program scan.

While EN is true, the instruction reads the state of a program's global variable (Variable) at its physical location and updates the latched value with the new value. The newly updated latched value is used in subsequent instructions as needed.

13.1.1 Input Parameters for the Immediate Input Instruction

This table lists the inputs for the IN instruction and the variable type and data type/range that each input supports.

Parameter	Description	Variable Type	Data/Type Range
EN	While this input is true, the instruction executes. When this input is false, the instruction is not executed and ENO is false.	Connect a Boolean input or output.	
Variable	Enter the global variable from which you want to use the latest value.	Simple	• Boolean • integer • double integer

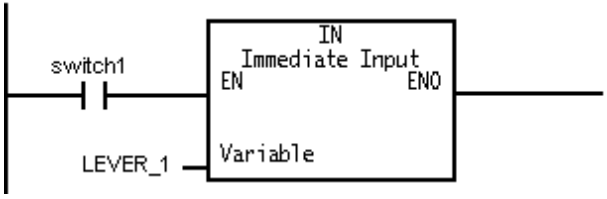
13.1.2 Output Parameters for the Immediate Input Instruction

This table lists the output for the IN instruction and the variable type that it supports. To use ENO, connect it to a contact, coil, or Boolean input of another instruction.

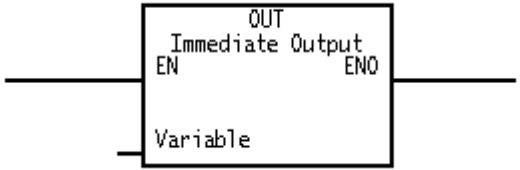
Parameter	Description
EN	While this input is true, the instruction executes. When this input is false, the instruction is not executed and ENO is false.
Variable	Enter the global variable from which you want to use the latest value.
ENO	Use this output as the input to another instruction for easily chaining multiple blocks. This output follows the state of the EN input.

13.1.3 Example of an Immediate Input Instruction

While *switch1* is true, the program's latched value for the global variable *LEVER_1* is updated.



13.2 Immediate Output (OUT)



Use the Immediate Output instruction when you need to update a global variable's physical location prior to the end of the program scan. Output locations are normally updated at the end of a program scan. This instruction lets you immediately use the latest output value for a global variable.

While EN is true, the instruction updates a global variable's (Variable) actual location with the value from the program's latched value.

13.2.1 Input Parameters for the Immediate Output Instruction

This table lists the inputs for the OUT instruction and the variable type and data type/range that each input supports.

Parameter	Description	Variable Type	Data/Type Range
EN	While this input is true, the instruction executes. When this input is false, the instruction is not executed and ENO is false.	Connect a Boolean input or output	
Variable	Enter the global variable that you want to update with the value from the program's latched value.	Simple	• Boolean • integer • double integer

13.2.2 Output Parameters for the Immediate Output Instruction

This table lists the output for the OUT instruction and the variable type and data type/range that it supports. To use ENO, connect it to a contact, coil, or Boolean input of another instruction.

Parameter	Description
ENO	Use this output as the input to another instruction for easily chaining multiple blocks. This output follows the state of the EN input.

13.2.3 Example of an Immediate Output Instruction

While *switch1* is true, the global variable *LEVER_1* is updated with its current latched value.