

Function	Symbol	Definition
MANUAL INPUT PROCESS INPUT		Hand Switch input to logic Process Switch input to logic.
AND		Output exists only when all inputs are present
OR		Output exists only when one or more inputs are present
NOT		Output exists only when input is not present
ON DELAY		Output exists only when input has been continuously present for a preset time and remains present
OFF DELAY (TIME MEMORY)		Output exists only when input is present and for a preset time after the input is not present
MEMORY		Output is same as input except: a) "R" input overrides "S" input b) no input -> output same as previous output c) "R" and "S" outputs can never be the same.
COINCIDENCE MATRIX		Output exists only when at least A out of B inputs are present
ISOLATION		Output is electrically isolated from input
LIGHT		RED (R) - Operating, Open GREEN (G) - Not operating, Closed AMBER (A) - Warning, take note WHITE (W) - Advisory information ref. J-0601
ANNUNCIATOR		Input to annunciator
COMPUTER		Input to computer
OUTPUT ACTION		Resultant action initiated by logic
CONTINUATION		Logic continuation

General Notes

- Logic symbols represent system functions and do not necessarily duplicate circuit arrangement or devices. Logic diagrams do not inherently imply energized, de-energized, or other circuit operation states.
- Process equipment will change state when a change is initiated, and will remain in this state until a change to another state is initiated.
- Inherent equipment interlocks such as circuit-breaker trip-free and anti-pump interlocks are not shown.
- For process control drawings, motor protection for devices operated from motor control centers is indicated as motor thermal overload protection. Motor protection for devices operated from switchgear is indicated as motor protection devices. See electrical schematic drawings for specific details of the protective devices.
- For process control drawings, the memory, reset, and start permissive logic associated with the operation of electrical protection devices is not shown. Auxiliary system circuits are reset by operation of a switch at the switchgear or motor control center.
- For process control drawings, any switches local to the switchgear are not shown.
- In general, all circuit controls, except interlocks with other equipment, function when a circuit breaker is in the test position to allow circuit testing.
- For motor operated valves the control logic for both the open and close output actions is shown. Position indicating lights are shown on each output action and operate as stated in J-0601, Indicating Light Color Standard.
- For solenoid pilot operated valves only the output action for the energized state of the solenoid pilot is shown. Also, the limit switch designation indicates two stem mounted limit switches. Open and close position indicating lights for the pilot operated valves are shown and it is understood that the indicating lights operate as stated in J-0601, Indicating Light Color Standard.
- All inputs to the plant annunciator system are also input to the plant computer system.
- Setpoints not shown on logic diagrams are shown on loop diagrams and level setpoint diagrams.

LOCATION
001-999 - Main control room panel
101-899 - Field control panel

ABBREVIATIONS
- Main control room panel
- Field control panel

DRAWINGS NUMBERING
Numbering conforms to Bechtel Engineering Procedure 6-6.

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COORDINATION SIGN-OFF

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5	12/27/82									

BECHTEL
GAITHERSBURG, MARYLAND

SNUPPS
JOB NO. 10465

CONTROL LOGIC DIAGRAM
SYMBOLS AND LEGEND FOR LOGIC DIAGRAMS

UTILITY DWG. NO.	REV.
BECHTEL DWG. NO.	REV.
J-020101	4
DWG. APPLICABLE TO UNITS	
1	2
3	4
5	6
7	8
REVIEW LEVEL 2	

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