| Operator | Logic Gate | | Example | | | Rule | |
|------------|---------------------|------------------|--------------|-----|---------|---|--|
| NOT | √ | | INPL | JT | OUTPUT | | |
| | | \overline{A} | Α | | NOT A | Invert | |
| | | 71 | 0 1 | | 0 | | |
| | | | | | 0 | | |
| | | | | | | | |
| AND | אס | | INPUT OUTPUT | | | | |
| AIID | | | Α | В | A AND B | Both A and B = $1 \rightarrow 1$ | |
| | | A D | 0 | 0 | 0 | _ | |
| | | A.B | 0 | 1 | 0 | Anything ELSE → 0 | |
| | | | 1 | 0 | 1 | | |
| | | | | | 1 | | |
| NAND | | _ | | PUT | OUTPUT | | |
| IVAIVD | -) | $\overline{A.B}$ | Α | В | A AND B | | |
| | | A. B | 0 | 0 | 1 | Both A and B = $1 \rightarrow 0$ | |
| | | | 0 | 1 | 1 | Anything ELSE → 1 | |
| | | | 1 | 0 | 1 | | |
| | | | 1 | 1 | 0 | | |
| O D | 7 | | INPUT OUTPUT | | OUTPUT | | |
| OR | | | Α | В | A AND B | Either A or B = $1 \rightarrow 1$ | |
| | | | 0 | 0 | 0 | | |
| | | A+B | 0 | 1 | 1 | Anything ELSE → 0 | |
| | | | 1 | 0 | 1 | | |
| | | | 1 | 1 | 1 | | |
| 1100 | 7 | | INPUT OUTPU | | OUTPUT | | |
| NOR | $\supset \sim$ | | Α | В | A AND B | Both A and B = $0 \rightarrow 1$ | |
| | | | 0 | 0 | 1 | | |
| | | $\overline{A+B}$ | 0 | 1 | 0 | Anything ELSE → 0 | |
| | | | 1 | 0 | 0 | | |
| | | | 1 | 1 | 0 | | |
| | <i>"</i> | | INPUT OUTPUT | | | | |
| XOR | → > | | A | В | A AND B | Either A or B = $1 \rightarrow 1$ | |
| | | A ⊕ B | 0 | 0 | 0 | Little AUD-1/1 | |
| | | | 0 | 1 | 1 | Excludes BOTH being 1 | |
| | | | | | | | |
| | | | 1 | 0 | 1 | | |

Logic Gate Table