

OR Gate

Data

IDs:

- 227 [block, on]
- 228 [block, off]
- 481 [item]


Name:

- OR Gate (On) [block, on]
- OR Gate (Off) [block, off]
- OR Gate [item]

Texture:

- MoareAI/Blocks/LGOROn.png [block, on] 
- MoareAI/Blocks/LGOROff.png [block, off] 

Icon:

- MoareAI/Items/LGOR.png [item] 

Recipe

Redstone (Dust)		=>	OR Gate (Item)
Sand	Redstone Torch		
Redstone (Dust)			



Interacting

After crafting the item “OR Gate” you can place it on the ground as the block “OR Gate (Off)”, which will automatically update to “OR Gate (On)” if the requirements are met (see function).

To pick it up again, destroy it by hitting it (one hit is enough) or by destroying the block underneath. This will yield the item “OR Gate”. This will also happen if the gate comes in contact with water.

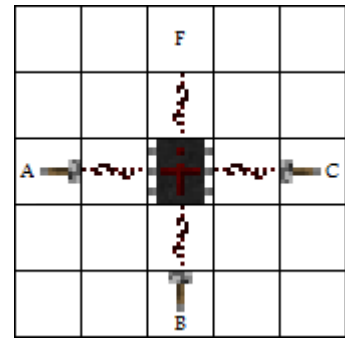
In contact with lava, both the item and the block is completely destroyed.

How to wire the gate

Wire as seen on the image, where “A”, “B” and “C” are the inputs and “F” is the output.

The connection for the output and input B may be in form of a direct signal or indirect signal through [Redstone Wires](#).

The connection for input A and C may be in the form of an indirect signal only, through [Redstone Wires](#).



The function of the gate

As description

The output gives a signal when either “A”, “B” or “C” gets a signal.

- If there is no signal on either of the inputs, there is no signal on the output
- If there is a signal on the “A”, “B” OR “C” input, there is a signal on the output

As Boolean algebra

$$F = A + B + C$$

“Output F” equals “input A” OR “input B” OR “input C”

As truth table

C	B	A	F
0	0	0	0
0	0	1	1
0	1	0	1
0	1	1	1
1	0	0	1
1	0	1	1
1	1	0	1
1	1	1	1