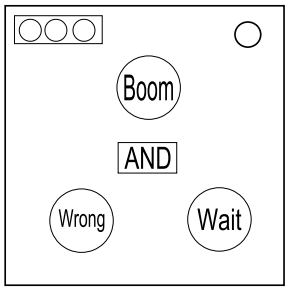
On the Subject of Logical Buttons



It has logical in the name, so if it doesn't make sense to you that's your fault.

SEE APPENDIX LOGBTNSX100 FOR LOGIC GATE REFERENCES.

- This module consists of 3 buttons, a stage counter and a screen stating a logic gate. To solve it you will have to go through 3 stages.
- In each stage you will have to determine which of the buttons you will have to press based on their color, label and the logic gate present.
- If multiple buttons have to be pressed in a stage you will have to determine the order in which you must press them.
- The buttons are numbered in reading order.
- Both the label and the color of a button will hold a true/false value. Once you get both values you run them through the logic gate and get an answer.
- If you get true, the button should be pressed and if you get false it shouldn't.
- If no button has to be pressed you must press the logic gate screen until you get a logic gate that allows you to press a button.

Determining values of colors/labels:

The value of the color/label is true if the condition is met.

Colors

- Red – No blue button present.
- Blue – Another blue button present.
- Green – The next button in clockwise order is purple or white.
- Yellow – The button's label is not "Wrong" or "Logic".
- Purple – No buttons in primary colors.*
- White – One or more buttons is in a primary color.*
- Orange – The top button is not orange.
- Cyan – The button's label is exactly 5 letters long.
- Grey – The button has the same label as another button.

Labels

- "Logic" – There are no gray buttons.
- "Color" – The button's color is not green, yellow or orange.
- "Label" – The top button's label is not exactly 5 letters long.
- "Button" – The next button in clockwise order's label is not "Hmmm" or "No".
- "Wrong" – The next button in counter-clockwise order's color is the same as this one.
- "Boom" – The other two buttons have the same color.
- "No" – This button's color condition is false.
- "Wait" – The module is in stage 3.
- "Hmmm" – The left button's colors condition is true.

*Primary colors are red, blue and yellow.

Determining order of presses:

Columns refer to which stage the module is in, rows refer to the arbitrary group that the present logic gate is in.

	Stage 1	Stage 2	Stage 3
Group 1	1,2,3	2,1,3	3,2,1
Group 2	3,1,2	2,3,1	1,3,2

Appendix LOGBTNSX100

Logic gates:

- AND – True if both inputs are true – Group 1
- OR – True if either input is true – Group 1
- XOR – True if exactly one input is true – Group 1
- NAND – True unless both inputs are true – Group 2
- NOR – True unless either input is true – Group 2
- XNOR – True unless exactly one input is true – Group 2