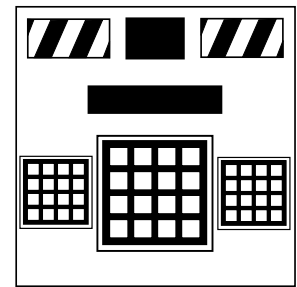


## On the Subject of RGB Logic

*The colors, Duke! The colors!*

When the module activates, the two small screens on the sides of the module will each show a 4x4 grid of squares. The grids each have eight squares of each RGB colour channel. These channels additively mix if they overlap.



The screen will display a logical statement with two letters:

- The first letter refers to the left screen.
- The second letter refers to the right screen.
- Each square returns true if its colour contains the primary colour indicated by the letter and returns false otherwise.

Select all the squares in the middle grid whose corresponding squares in the other two grids satisfy the displayed condition.

Avoid selecting any squares that fail the displayed condition.

### Appendix: Logical Symbols

Symbol	Logic Gate	Operation		
		A	B	A * B
$\wedge$	AND	F	F	F
		F	T	F
		T	F	F
		T	T	T
$\vee$	OR	F	F	F
		F	T	T
		T	F	T
		T	T	T
$\underline{\vee}$	XOR	F	F	F
		F	T	T
		T	F	T
		T	T	F

Symbol	Logic Gate	Operation		
		A	B	A * B
$\bar{\wedge}$	NAND	F	F	T
		F	T	T
		T	F	T
		T	T	F
$\bar{\vee}$	NOR	F	F	T
		F	T	F
		T	F	F
		T	T	F
$\leftrightarrow$	XNOR	F	F	T
		F	T	F
		T	F	F
		T	T	T