# On the Subject of Superparsing

Bringing the heat.

- This module contains a blank letter display on the top and four squares with different selectables on each, all on top of a metallic red background. There is also a timer bar on the right which begins empty.
- To activate the module, press the letter display. A four
- begin to fill. Use the displayed word in conjunction with the instructions below to calculate the correct submission for each square. Successfully submitting any of the four squares turns its border white and resets the timer bar back to 10 seconds.
- Complete all four squares in any order to solve the module. Submitting an incorrect square state or letting the timer bar run out results in a strike and resets the module.

### Square I: Quadrants

- Concatenate all of the digits in the serial number. Modulo this by 4 and add 1. Let this number be called  $N_{\bullet}$
- Assign the letters of the word from left to right to the quadrants in reading order.
- Sort the letters in the word in alphabetical order. Press the quadrant assigned to the Nth letter of the sorted word.
- Ties are broken from left to right in the original word.

#### Square II: Switches

- Two switches need to be set to their correct positions (up or down):
- Use the number of lit indicators minus the number of unlit indicators in the below table to obtain a condition.
- If this difference is not in the table, use the N/A row.

Num	Condition	
-2	Comes before the 4th character of the serial number in	the alphabet
-1	Is within the range A-M (inclusive)	
0	Is a vowel	
1	Is within the range N-Z (inclusive)	49 1/4
2	Comes after the 5th character of the serial number in	the alphabet
N/A	Is a consonant	

- For each letter in the word, apply the determined rule to it to get a sequence of 4 truth values.
- Use number of ports modulo 6 in the below table to obtain an operator. Apply this operator to the first two and last two truth values to obtain two values.
- These two truth values correspond to the correct switch positions where true represents up and false represents down.

		0	1	2 -	3	4	5
		AND	OR	XOR	NAND	NOR	XNOR
T	T	Т	Т	F	F:	F	Т
T	F	F	Т	Т	T	F	F
F	T	F	Т	Т	T	F	F
F	F	F	F	F	Т	Т	Т

• To submit the switches, flip the same switch twice consecutively. The switch will move, and then the answer will be submitted.

#### Square III: Sliders

- The three horizontal sliders on the square can be set to one of three positions.
- To find the correct positions, take the cell which contains the intersection of the number of batteries along the left and ports along the top as the top-left corner of a 3×2 region used for this square's answer.
- For each row in the region, the displayed word can be placed to the left of the two words, in between the words, or to the right of the words so that the row reads in alphabetical order in one direction.
- Set each slider to this position for each row and press the rectangular button below the sliders to submit the current sliders.

	0	1	2	3	4+	
0-1	ELSE	ZITI	AREA	POUR	KILL	TRUE
2-3	BUNK	OWES	DINO	SPAR	DARE	QUIP
4+	YOUR	FLIP	ATOM	LAUD	URGE	JINX
	NODE	CLUE	HULA	WORN	RAIL	COUP
1	GROW	XYLO	MILE	BREW	ICON	VIEW

## Square IV: Dial

- The dial can be set to any of the four cardinal directions, and the button on the left/right submits the current dial direction.
- In the grid below, the cell that the dial represents is the cell with Roman numerals which contains the different square types as displayed on the module.

E	III IV	Т	III VI	A	II IV	I	I III
IIIII	0	IIIII	N	III VI III	S	II I I	R
Н	IIIII	D	IV I	L	IIII IV	Ŭ	IIIII
II IV	С	II VI	M	IIIII	F	IVI	Y
W	III IV	G	II II	Р	IVI	≅ B	IVI
II III	V	III I	K	III VI	Х	II I	<sup>2</sup> . Q

• If the submit button is to the right of the dial, turn the dial towards an adjacent square that contains a letter in the displayed word. Otherwise, turn the dial towards the opposite direction of a valid adjacent square.