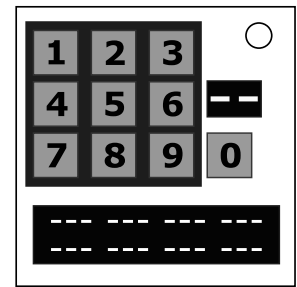# On the Subject of Forget's Ultimate Showdown

No, this is not a boss module. Stop being judgeme... Oh wait that's already taken.

- This module will show buttons 0-9, and 2 displays.
- To solve the module you must input a code.
- To start the module, press the button labeled '0'. This will cause the buttons 1-9 to be replaced with 4 encryption methods which you might recognize from different boss modules.
- The bottom display will show two twelve digit numbers, the top number is the one which you will need to encrypt and the bottom number will be used in some methods.
- Run through the methods left to right, top to bottom and use the correct manual on the next page to encrypt the number once for every method.
- Once you have got the answer from the final encryption, press the button labeled '0' to make the buttons 1-9 to reappear. Be careful since you can't go back to the encryption phase after this.
- A strike will cause the module to reset and you can then go back to the encryption phase.

Step 1: Identifying the encryption methods used.

- A method from Forget Me Not will be a display showing "--" with black wiring around it.
- A method from Simon's Stages will be the color indicator from the module along with a color rule.
- A method from Forget Me Later will be a display cycling 12 different numbers with a red border around the display.
- A method from Forget Infinity will be a display with 4 cubes in the corners and display 2 numbers with a '/' in between them.
- A method from A>N<D will be a slightly tilted disply cycling 12 different symbols corresponding to logic gates.
- A method from Forget Me Now will be a display similar to Forget Me Not, but it has gray wiring and shows a 2 digit number.
- A method from Forget Everything will be 3 LEDs colored random colors with wiring leading to the edge.
- A method from Forget Us Not will be a black display cycling 12 different green numbers.

Step 2: Encrypting the number.

If the encryption method is from...

- Forget Me Not

    1. Just use the regular Forget Me Not rules on the encrypted string to obtain the new encrypted string.

- Simon's Stages

    1. If the rule applies to the entire string(for example blue or Red), just apply the rule to the string to obtain the encrypted string.
    2. If the rule(only rules taking the opposite of something) only applies to only some numbers in the string, replace the digits in those positions with the corresponding opposite digit.
    3. To figure out the opposite digits, make 2 rows of 5 digits each, take the last digit of the serial number in the top left, continue clockwise adding 1 to the number every time and take it modulo 10. The opposite number would be the same position as the number in the other row.
    4. NOTE: The rules Yellow, Orange, Magenta and Green will never appear.

- Forget Me Later

    1. Use the 12 different rules on each corresponding digit in the encrypted string using the current digit as the "received digit", and the already calculated digits as the "last/second last input" (If there is no last/second last calculated digit, use 0 instead).
    2. This is your new encrypted digit.
    3. NOTE: Only rules using the "received digit" in its calculation will appear on this module. So for example, rule 5 will never appear.

- Forget Infinity

    1. Take the 12 digit string and remove the numbers(remember these numbers) in the positions shown on the display.
    2. Split the number into 2 groups of 5 numbers and encrypt them using the Forget Infinity method.
    3. Insert the 2 removed numbers in the same positions to make the string 12 digits long again.
    4. NOTE: When the module asked for the number of stages generated, use the number of groups of 5 (which is 2).

- A>N<D

    1. Use the corresponding digit in the encrypted string as the first digit, and the digit in the same position in the bottom row as the second digit.
    2. Convert both of them to 4 digit binary and use the original manual to encrypt them.
    3. This is your new encrypted digit.
    4. NOTE: When the module asks for odd or even stages, use the position of the digit in the encrypted string starting at 1.

- Forget Me Now

    1. Just use the regular Forget Me Now rules on the encrypted string to obtain the new encrypted string using the digital root of the number on the display as the number used to start the module.

- Forget Everything

    1. Use the 3 LEDs to obtain the rule used.
    2. Apply the corresponding rule for every digit using the encrypted string as the "current" and the bottom string as the "previous".
    3. This is your new encrypted digit.

- Forget Us Not

    1. Split the encrypted string into groups of 3 by taking the first 3 numbers into the first group, then shifting the string 1 to the left. And repeating until you have 12 groups of 3.
    2. Calculate each group of 3 numbers using the rules from Forget Us Not and insert them into the new ecrypted string in the position shown on screen in the same position as the 3 digit string.

Once you have encrypted the number with every method you can submit it using the keypad.