Yo Notation:

A turn-based encoding notation system for the 3x3

Singmaster notation is good to generate scrambles and stuff, but not good enough for memorization.

Video link: Yo Notation
I have also added ways to memorize wide moves and rotations, which was not covered in the video.
On the alg trainer the keys are remapped as per the Yo notation mostly. Note that double turns will have to be done as two quarter turns and they are not programmed differently. (eg. R2 is R R, or on kb jj)

It will take a while before you can get used to it and comfortably solve the virtual cube.

Key Move

["j", "R"],
["k" , "R'"],
["a" , "U"],
["b" , "U'"],
["v" , "F"],
["w" , "F'"],
["y" , "B"],
["z" , "B'"],
["g" , "L"],
["h" , "L' "],
["d" , "D"],
["e" , "D'"],
["u" , "r"],
["," , "r'"],
["c" , "l"],
["r" , "l'"],
["m" , "M"],

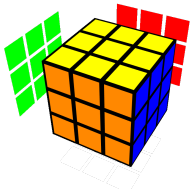
["m" , "M"],
["n" , "M'"],
["o" , "x"],
["." , "x'"],
["z" , "y"],
["[" , "z"],
[";" , "z'"],
["/" , "y'"],
["s", "S F'"],
["t", "S' F"],
["p", "E"],
["q", "E'"]];

U - A

U' - B

U2 - C

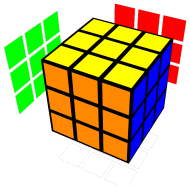
D - D



D' - E

D2 - F

L - G



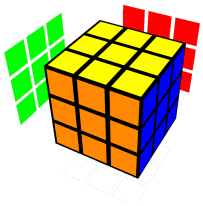
L' - H

L2 - I

M - M

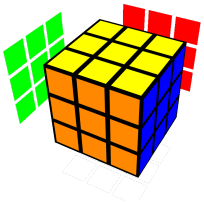
M' - N

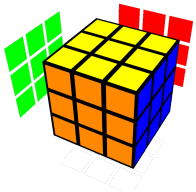
M2 - O



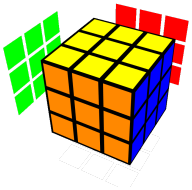
R - J

R' - K

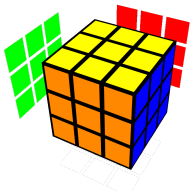




R2 - L

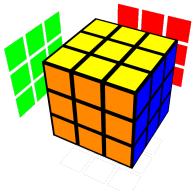


E' - Q

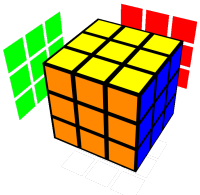


S - S

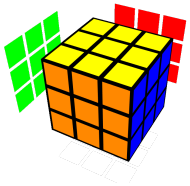
E2 - R



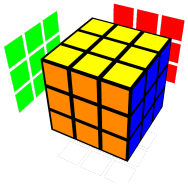
S' - T



F - V



F' - W



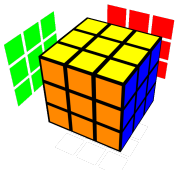
S2 - U

F2 - X

E - P

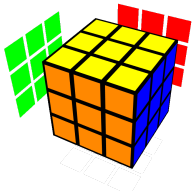
B - Y

B' - Z

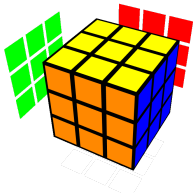


And for wide moves,

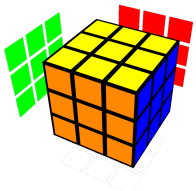
u - QA



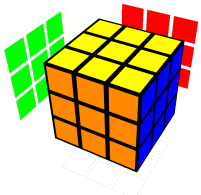
u' - BP



u2 - RC

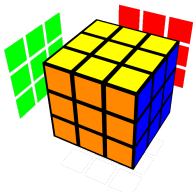


f - SV

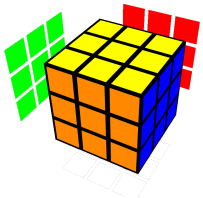


f' - WT

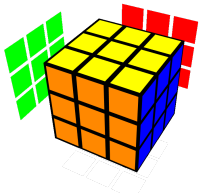
f2 - XU



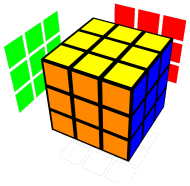
l' - NH



l - MG

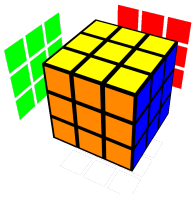


l2 - OI

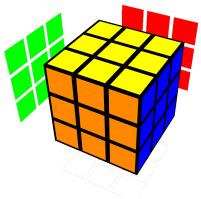


r - NJ

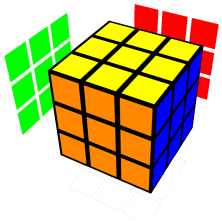
r' - MK



r2 - OL

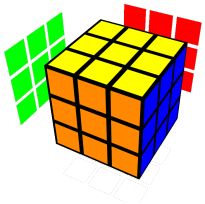


x - LI

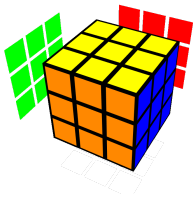


x' - MI

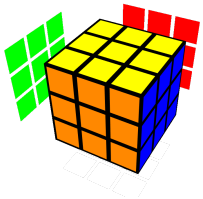
y - GI



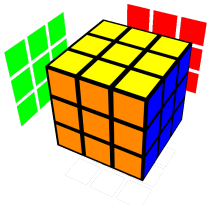
y' - KJ



z - QP



z' -DP



(I have chosen these letter pairs as these were rarer in the algorithm string and had strong imagery in my letter pair scheme. You can choose otherwise according to your personal preference.)There are also an insane amount of cancellations I have come up with, but it will be pretty advanced if you are trying this for the first time. This system takes time to get accustomed to. For fun sake, I have decided to name this system as Yo notation.

2. Memorizing commutators

Translating the entire move sequence doesn't work well in the case of a commutator.
Commutator Doc reference

For example,
AB - [R' D' U' : [R' D R, U']]
Extended Yo notation translation- **kebk djbk ejcdj**
Shortcut - **(keb,kdja) :** from the first element inside the bracket we get to know the setup moves, and the second element becomes the insertion and interchange move. With a little bit of training, we can find out 'kdj' is an insertion and 'a' is the interchange move, and the whole sequence reads [R' D R, U'].

3. Memorizing 5-style edge algs

Remembering algorithms via triggers will work in the 5-cycle case (oiag) : [U : [M, F]]
but not in the case (dula): **F2 M' F' E2 F' L' F E2 F' l**, which have some 3 move insertion in its sequence but no triggers or straightforward [A, B] commutator form inside it. So, it is best to memorize 'dula' as '**xnwr whvr wmg**', from which we can form 3 images and memorize the sequence without having a mental note to take care of. According to my personal experience, reading off 'Yo notation' is not natural at first and is roughly two times slower than reading off the standard R U R' U' notation. We just need to be patient and stick with 'Yo Notation' until we become bilingual in reading off Cube Face Turns!

4. Yo Notation for bigger puzzles (5x5)

Smaller letters are used for inner slices, and for wide moves, the small letters and Capital letters are appended together.

Yo Notation formula for Google sheets

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UBSTITUTE(SUBSTITUTE(SUBSTITUTE(SUBSTITUTE(D2,"U","a"),"U'","b"),"U2","c")
,"L","g"),"L'","h"),"L2","i"),"R","j"),"R'","k"),"R2","l"),"D","d"),"D'","
e"),"D2","f"),"F","v"),"F'","w"),"F2","x"),"M","m"),"M'","n"),"M2","o"),"S
","s"),"S'","t"),"S2","u"),"E","p"),"E'","q"),"E2","r")
```

This formula is not currently working well as the substring F and F' which denote different direction face turns cannot be distinguished by the substitute formula.

About Yo

I have not used this system to memorize ZBLL, as I use the Roux method and new other methods (**MethNeu**) to solve a 3x3.
Although I am currently creating a set called YBLL in Yo Notation, it will be more focussed towards solving 3BLD parity rather than LL of 3x3 speedsolve.
If you have any further doubts or need help or clarification, drop a mail to 5stylerepertoire@gmail.com

I am always open to debates.
SS threads dedicated to this topic: Link 1 Link 2 Link 3

Happy memorizing!