## One-Handed PLL Algorithms

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## Algorithm Presentation Format



## Suggested algorithm here

Alternative algorithms here
PLL Case Name - Probability = $1 / \mathrm{x}$

Round brackets are used to segment algorithms to assist memorisation and group move triggers.

Moves in square brackets at the end of algorithms denote a $U$ face adjustment necessary to complete the cube from the states specified.

It is recommended to learn the algorithms in the order presented.

## Permutations of Edges Only


z (U'R U'R') (U'R' U'R) U R U2'
y z $\mathrm{U}^{\prime} \mathrm{R}$ U ( $\mathrm{R} \mathrm{U}^{\prime} \mathrm{R}^{\prime} \mathrm{U}^{\prime}$ ) (R' U' R U')
Ub - Probability= $1 / 18$
y (R' U' R U') (R U R U') (R' U R U) R2 U' R' [U2]
Z - Probability $=1 / 36$
(R U'RU)RU(R U'R' U') R2 2 $2\left(R 2 U^{\prime} R^{\prime} U^{\prime}\right) R U R U\left(R U^{\prime} R\right)$
Ua - Probability = $1 / 18$


## Permutations of Corners Only


$x$ (R' U R') D2 (R U' R') D2 R2 x'
x' U2' R2 (U' L' U) R2 (U' L U') x
x R2' D2 (R U R') D2 (R U'R) $x^{\prime}$ $x^{\prime} z\left(R U^{\prime} R\right) z Z^{\prime} 2\left(U^{\prime} L U\right) R 2 U 2 ' x$
Aa - Probability $=1 / 18$
Ab - Probability $=1 / 18$

y R2 U R' U' y (R U R' U') (R U R' U') (R U R') y' R U' R2
$x^{\prime}\left(R U^{\prime} R^{\prime} D\right)\left(R \cup R^{\prime} D^{\prime}\right)\left(R \cup R^{\prime} D\right)\left(R U^{\prime} R^{\prime} D^{\prime}\right) x$
E - Probability= $1 / 36$

## Swap One Set of Adjacent Corners


(RU'R' U') (RURD)(R' U'RD')(R'U2'R'] [U'] (R' U2'R' D') (RU'R' D) (RURU') (R' U' R) [U'] (RUR'F) (RU2'R' U2') (R'F R U) (RU2'R') [U'] (R'U2'RU2') R' F (RUR'U') R' $\mathrm{F}^{\prime} R 2\left[U^{\prime}\right]$ Ra - Probability $=1 / 18$ Rb - Probability $=1 / 18$

(R' U L' U2) (R U' R' U2' R) L [U'] $y^{\prime} z\left(U^{\prime} R 2 U R U ' R 2\right) z z^{\prime}\left(R U^{\prime} L \cup R^{\prime}\right)$
Ja - Probability $=1 / 18$

(R U R' U') (R' F R2 U') R' U' (R U R' F')
$T-$ Probability $=1 / 18$

R U2' R' U'R U2' L' U R' U' L
Jb - Probability $=1 / 18$

$y^{\prime}\left(R \quad U R U^{\prime}\right)\left(R^{\prime} U R U 2 '\right) L^{\prime}\left(R^{\prime} U R U^{\prime}\right) L\left(U^{\prime} R U^{\prime} R^{\prime}\right)$ ( $\left.R^{\prime} U^{\prime} F^{\prime}\right)\left(R \cup R^{\prime} U^{\prime}\right)\left(R^{\prime} F R 2 U^{\prime}\right)\left(R^{\prime} U^{\prime} R U\right)\left(R^{\prime} \cup R\right)$
F - Probability $=1 / 18$


## Swap One Set of Diagonal Corners



## G Permutations (Double cycles)



R2 U (R' U R' U') (R U' R2) D U' (R' U R D') [U] R2 u (R' U R' U') R u' R2 z (U' R U)

Ga- Probability=1/18


R2 U' (R U' R U) (R' U R2 D') (U R U' R') D [U']
Gc - Probability= $1 / 18$
y' (R' U'R U) D' (R2 U R' U) (R U'R U') R2 D [U'] $y^{\prime}\left(R^{\prime} U^{\prime} R\right)$ y (R2u R'U) (R U'R u') R2
Gb - Probability $=1 / 18$


D' (R U R' U') D (R2 U'R U') (R' U R' U) R2 [U] (R U R') y' (R2 u'R U') (R' U R' u) R2
Gd - Probability $=1 / 18$

