

Rubik cube solution (v1)

1st layer

step 1 - make U cross (Note: colours must match with center of L,R,F,B too)

bring correct piece on R (2nd or 3rd layer)

if orientation is correct just rotate R

if it is not correct change orientation around 2nd layer axis

step 2 - complete 1st layer (corners)

bring correct piece on DBR (3rd layer)

a) if U color is on D then do D2 (store piece) R D R' now it's case c)

b) if U color is on R then do R D R'

c) if U color is on B then do D (store piece) R D' R'

2nd layer

step 1 - 2nd layer edge pieces (4 pieces)

find on D an edge piece that must go to 2nd layer

look the colour of piece on D and now let center-F be that colour

rotate D so that piece is on the opposite side

if other colour matches L, do F' D' F D (bring UFL on DFL) L D L' (restores corner piece and position 2nd layer piece)

if other colour matches R, do F D F' D' (bring UFR on DFR) R' D' R (restores corner piece and position 2nd layer piece)

Note: if piece to position/orient is on 2nd layer it's possible to lower the piece by swapping it with a piece on D, but sometimes if beginning positioning 3rd layer pieces, those on 2nd layer may lower themselves

Note 2: pieces on 3rd layer that haven't D center-colour can be moved immediately

3rd layer

step 1 - form cross on last layer

turn the cube upside-down

if two adjacent edge pieces are correct bring them to UF and UR and apply

B U L U' L' B'

by Polarsun

if two opposite edge pieces are correct (bring them to UR and UL) and
apply B L U L' U' B'
if no piece is correct apply B L U L' U' B' F U R U' R' F' (same as 2nd
formula, then turning of 180° and 1st formula)

position U face edge pieces

if 2 adjacent edge pieces are correct rotate U so that 1 edge piece is correct
if 2 opposite edge pieces are correct rotate U so that 0 edge pieces are
correct

trov. altra if 1 piece is correct, bring it to UL position and
to rotate it clockwise apply R2 D' U2 R' L F2 R L' D R2
trov. altra to rotate it counter-clockwise apply R2 D' R' L F2 R L' U2 D R2
if 0 pieces are correct
turn U so that front colour of UF = center of R
non funz. sempre apply R2 D2 B2 D L2 F2 L2 F2 L2 F2 D' B2 D2 R2

step 2 - position and rotate 3rd layer corner pieces

position corner pieces

if only 1 corner piece is in the right place, bring it to the UFR
to rotate others clockwise apply L' U R U' L U R' U'
to rotate others counter-clockwise apply U R U' L' U R' U' L
if 0 pieces are correct
to let them go to opposite corners apply R' B2 F R F' R' F R F' R' F R F'
R' B2 R
to swap UFR with UFL and UBR with UBL apply B L U L' U' L U L'
U' L U L' U' B'

rotate corner pieces

hold the cube so that piece to be rotated is in UFR
to rotate clockwise apply F D2 F' R' D2 R
to rotate counter-clockwise apply R' D2 R F D2 F'
rotate only U to the next corner to adjust and repeat the last combinations
when all corners are ok rotate U so to finish the cube

Note: when rotating U it's normal that all cube messes up!