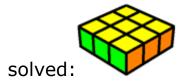
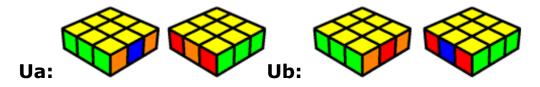
# 3x3x3: PLL Recognition Guide EPLLs

Category 0: Two 3x1 Blocks



I hope you can recognize this.

#### Category 1: One 3x1 Block

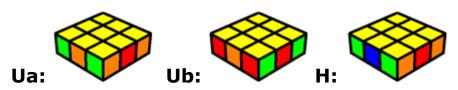


When the block is on the left:

- -It's Ub when an opposite edge colour is on the right
- -It's Ua when an adjacent edge colour is on the right

  When the block is on the right:
- -It's Ua when an opposite edge colour is on the left
- -It's Ub when an adjacent edge colour is on the left

## Category 2: No 3x1 Blocks & At Least One Opposite Edge



- -It's Ua when an opposite edge colour is on the right
- -It's Ub when an opposite edge colour is on the left

-It's H when an opposite edge colour is on each side

# Category 3: No 3x1 Blocks & No Opposite Edge



When there are no opposite edges:

-It's Ua when a checker pattern is only on the left

-It's Ub when a checker pattern is only on the right

Otherwise:

-It's Z

# **Diagonal CP**

#### **Category 1: Two Blocks**









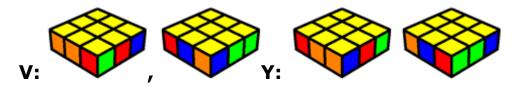
-It's V when the blocks are both on the inside

-It's Y when the blocks are both on the outside

-It's Na when the inner corner is part of a left block

-It's Nb when the inner corner is part of a right block

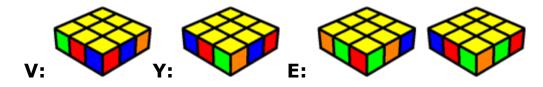
## **Category 2: One Block**



-It's V when there's a block on the outside

-It's Y when there's a block on the inside

## **Category 3: No Blocks**



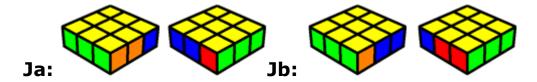
-It's V when there's a checker pattern on the inside

-It's Y when there's a checker pattern on the outside

-It's E when there's no checker pattern at all

## **Adjacent CP - Two Blocks**

#### Category 1: One 3x1 Block & One 2x1 Block

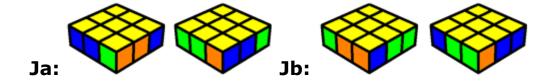


When the 3x1 block is on the left:

- -It's Ja when the 2x1 block is on the inside
- -It's Jb when the 2x1 block is on the outside

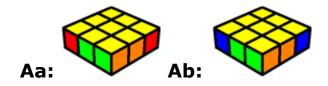
  When the 3x1 block is on the right:
- -It's Jb when the 2x1 block is on the inside
- -It's Ja when the 2x1 block is on the outside

#### Category 2: One Outer 2x1 Block and One Inner 2x1 Block



- -It's Ja when the 2x1 block on the outside is on the left
- -It's Jb when the 2x1 block on the outside is on the right

## **Category 3: Two Inner 2x1 Blocks**



- -It's Aa when the outer corner on the right is opposite
- -It's Ab when the outer corner on the left is opposite

# Adjacent CP - Headlights, One Block

#### **Category 1: Inner Block**









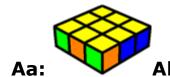
When the edge in between the headlights is adjacent:

- -It's Ra when the block is on the right
- -It's Rb when the block is on the left

Otherwise:

-It's T

## **Category 2: Outer Block**









When only three unique colours are visible:

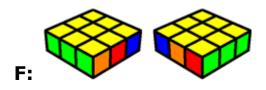
- -It's Aa when the block is on the right
- -It's Ab when the block is on the left

Otherwise:

- -It's Ga when the block is on the right
- -It's Gb when the block is on the left

## Adjacent CP - No Headlights, One Block

#### Category 1: One 3x1 Block



-It's F

## **Category 2: Inner Block**



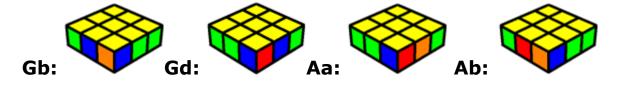
When the corner beside the block is adjacent:

- -It's Ga when the block is on the left
- -It's Gc when the block is on the right

#### Otherwise:

- -It's Gb when the block is on the left
- -It's Gd when the block is on the right

#### **Category 3: Outer Block & Opposite Corner**



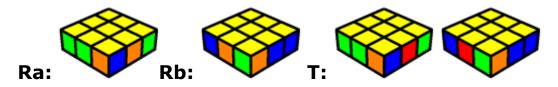
When only three unique colours are visible:

- -It's Gb when the block is on the right
- -It's Gd when the block is on the left

#### Otherwise:

- -It's Aa when the block is on the left
- -It's Ab when the block is on the right

# **Category 4: Outer Block & Adjacent Corner**



When only three unique colours are visible:

-It's Ra when the block is on the right

-It's Rb when the block is on the left

Otherwise:

-It's T

# Adjacent CP - Headlights, No Blocks

#### **Category 1: Opposite Edge In Between Headlights**



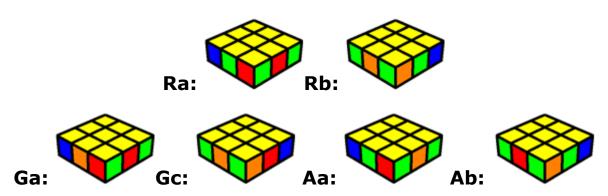
When only three unique colours are visible:

- -It's Gb when the block is on the left
- -It's Gd when the block is on the right

#### Otherwise:

- -It's Gb when the block is on the right
- -It's Gd when the block is on the left

#### **Category 2: Adjacent Edge In Between Headlights**



When only three unique colours are visible:

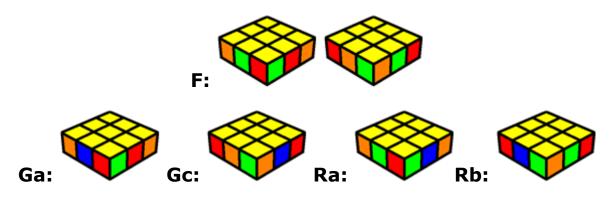
- -It's Ra when the headlights are on the left
- -It's Rb when the headlights are on the right

#### Otherwise:

- -It's Ga when the headlights are on the right and there is no checker pattern
- -It's Gc when the headlights are on the left and there is no checker pattern

-It's Aa when the headlights are on the right and there is a checker pattern
-It's Ab when the headlights are on the left and there is a checker pattern

# Adjacent CP - No Headlights, No Blocks



#### When only three unique colours are visible:

## -It's F

#### Otherwise:

-It's Ga when an opposite outer corner is on the right
-It's Gc when an opposite outer corner is on the left
-It's Ra when an opposite inner corner is on the right
-It's Rb when an opposite inner corner is on the left