Yau5 Method for Solving the 5x5 Cube

Supplementary to video tutorials at https://www.cubeskills.com/tutorials/the-yau5-method

Developed by Feliks Zemdegs
Images sourced from Conrad Rider's VisualCube - http://cube.crider.co.uk/visualcube.php

Introduction

Proposed by Robert Yau, the Yau5 method for solving the 5x5 is used by some of the top 5x5 cubers, and is widely considered to have similar potential to the reduction method. The method is a slight variant on the reduction method, with the main difference being that we solve the centers and the cross for the 3x3 stage before we pair up the remaining edge pieces. Additionally, on the 5x5, the standard Yau5 method involves solving two F2L pairs of the 3x3 stage before pairing up the final 4 edges, which is the biggest difference between Yau5 and the Yau method on the 4x4.

Before reading this guide you should be familiar with how to solve the 5x5 cube and the different types of pieces on the cube, and ideally, you should know how to solve a 4x4 cube using the Yau method.

This guide is also intended only as a supplementary reference to the video tutorials linked at the top of this document, which explain the steps of the Yau5 method in more detail.

Solving Two Opposite Centers

The first step in the Yau method is to solve two opposite centers. In this tutorial we will solve the white and yellow centers.

Solving Three Cross Edges

After solving two centers, hold them on the left and right hand side of the cube. Using the middle slice layers and outer layer turns, solve three cross edges around one of the two centers solved in the first step. In this example, we have solved three white cross edges. If you're a right-hand dominant cuber, then we suggest trying to solve the edge pairs onto the left side of the cube, and vice-versa.

It's important to remember to pair and solve the cross edges in their correct relative positions, as is the case using the Yau method on the 4x4 cube.
Solving The Last Four Centers

The next step is to solve the remaining four centers on the 5x5 cube. This is slightly more difficult than with the basic reduction method, because we have an added restriction – we can’t do any moves which mess up the three cross edges we have solved. So, we need to take this into account and adjust the face which contains our cross edges whenever it is necessary to do so.

It will take a little bit of time to get used to these restrictions as you transition from the reduction method, but they will eventually become automatic, and you’ll become more confident in solving the centers without breaking up the solved cross edges.

Solving The Last Cross Edge

Next, simply pair and correctly place your final cross edge to complete your cross and centers. This can either be done whilst holding the cross on the bottom face or on the left face, and is a straightforward step.

An alternative technique for this step is to actually pair up the final cross edge before solving the last four centers, and store it on the right hand side whilst you solve the last four centers. This and more examples are shown in the tutorial videos.

Solving The Next Four Edges

After solving the cross and centers, we will now pair up four edge pieces using the Freeslice method, and store them in the top layer like so.

Ensure that two of the four edges which you solve belong in adjacent slots during your 3x3 stage.
Solving Two F2L pairs

Using two of the edges created in the previous step, solve two F2L pairs adjacent to one another (using just outer layer turns, as if it were a 3x3), and hold the completed pairs at the back of the cube.

![Image of solved F2L pairs]

Solving The Last Four Edges

Using the two slots in the front of the cube to perform slice moves, solve your final four edge pairs, and solve edge parity if necessary. Examples and more specific instructions for this step are shown in the tutorial videos.

![Image of solved edge pairs]

Finishing The 3x3 Stage

After this, you can now finish off the cube by solving the final two F2L slots and then the last layer. This step is very quick with the Yau5 method because we have already completed our cross and two F2L pairs!