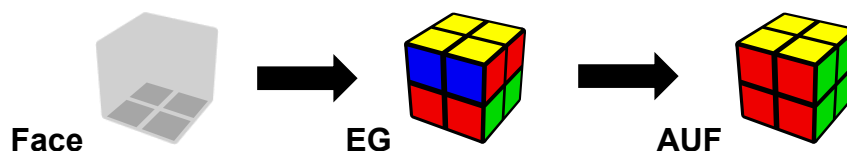


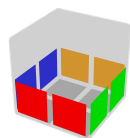


## 2x2 EG Methods (Erik-Gunnar)

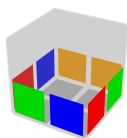
Algs from Chris Olson <http://cyotheking.com>, Will Callan <http://bit.ly/2lQXlxe>, Jack Pan <http://bit.ly/2nCwwyc>



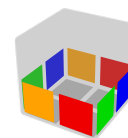
### Intermediate



CLL

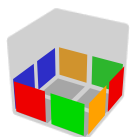


EG1

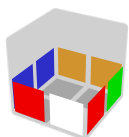


EG2

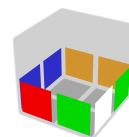
### Advanced



LEG



TCLL+



TCLL-

### Supplement



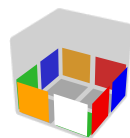
LS1



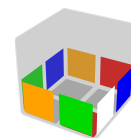
LS2



LS3



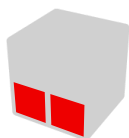
TEG2+



TEG2-

Special finger trick: In  $F' U'$ , use right index to execute  $F'$ .

### Predict D Layer



Matched Color Side

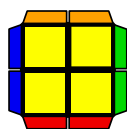


Opposite Color Side

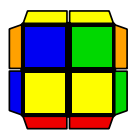
2 matched color side  $\Rightarrow$  CLL; 2 opposite color side  $\Rightarrow$  EG2; Other cases  $\Rightarrow$  EG1, and the opposite side of opposite color side is matched color side.

### Predict AUF (Adjust U Face)

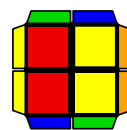
After doing alg, U layer will follow the image below (exceptions exist), then AUF can be recognized by comparing U layer to D layer.



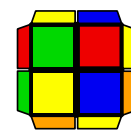
### Examples



**$R' U' R^2 U R' U^2 R U^2 R' U R'$**   
Pick FUR sticker as AUF sticker.  
After doing alg, it will be front.

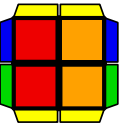
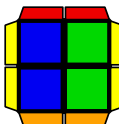
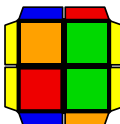
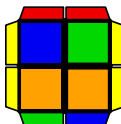
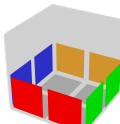
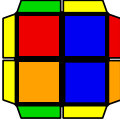
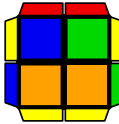
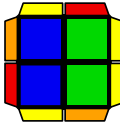
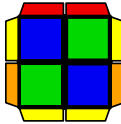
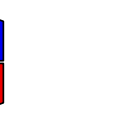
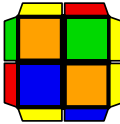
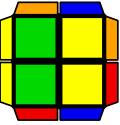
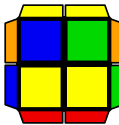
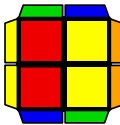
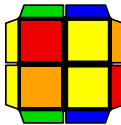

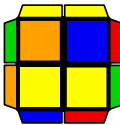
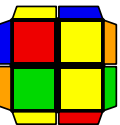
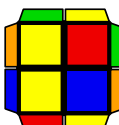
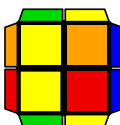
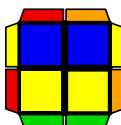

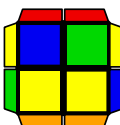
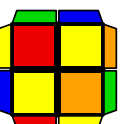
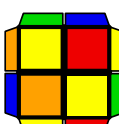
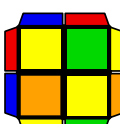
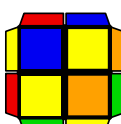

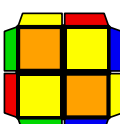
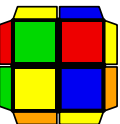
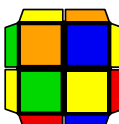
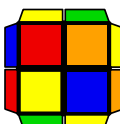
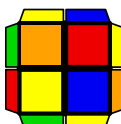

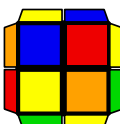
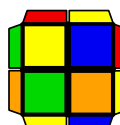
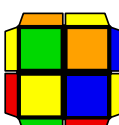
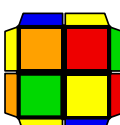
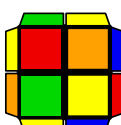

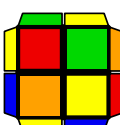


**$R U^2 R U' R' F R' F^2 U' F$**   
Pick UFL sticker as AUF sticker.  
After doing alg, it will be front.

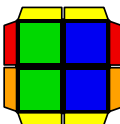
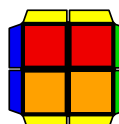
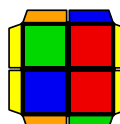
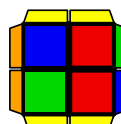
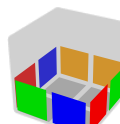

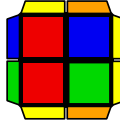
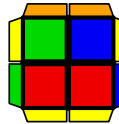
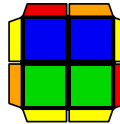
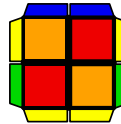
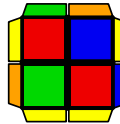
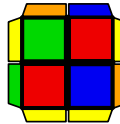
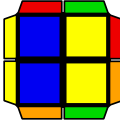
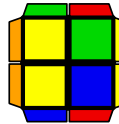
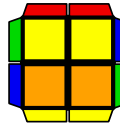
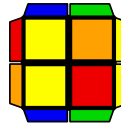
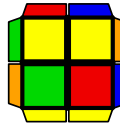
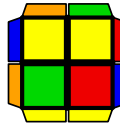
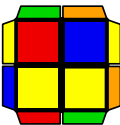
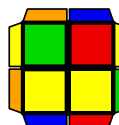
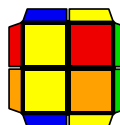
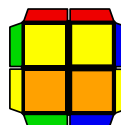
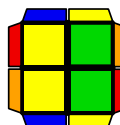
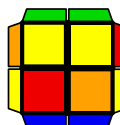
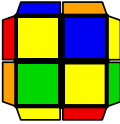
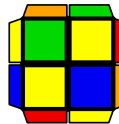
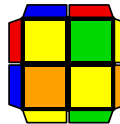
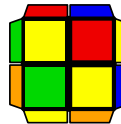
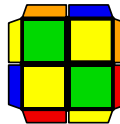
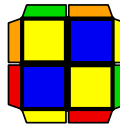
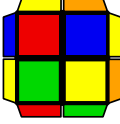
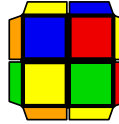
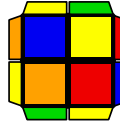
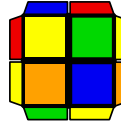
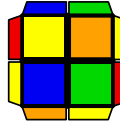
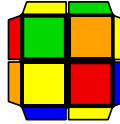
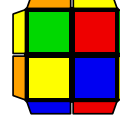
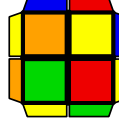
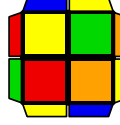
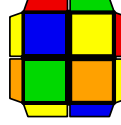
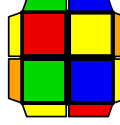
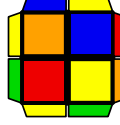


**$R U R' U R U^2 R'$**   
Pick FUL sticker as AUF sticker.  
After doing alg, it will be back.

## 2x2 CLL Algorithms

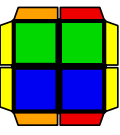
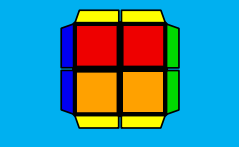
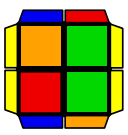
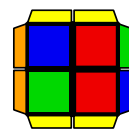

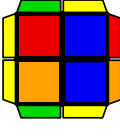
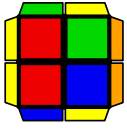
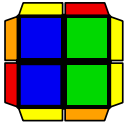
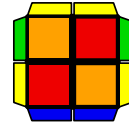
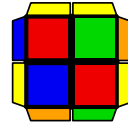
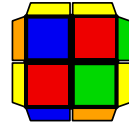
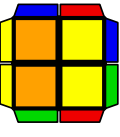
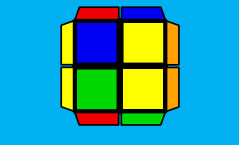
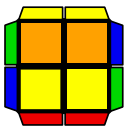
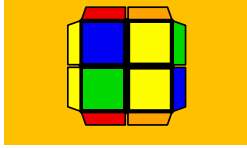
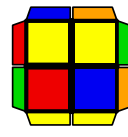
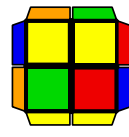
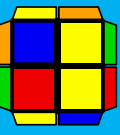

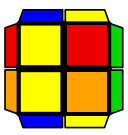
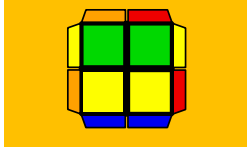
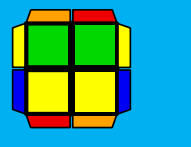
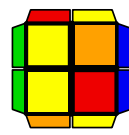
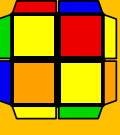
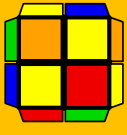
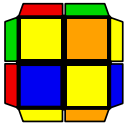
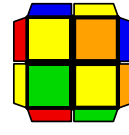
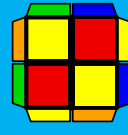
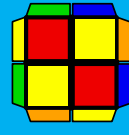
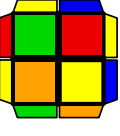
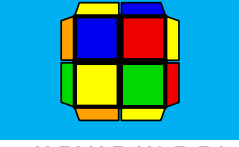
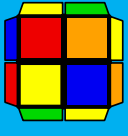
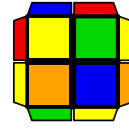
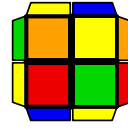
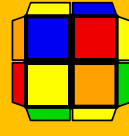
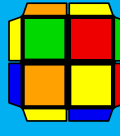
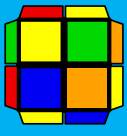
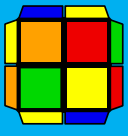
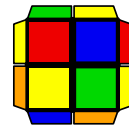
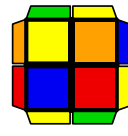
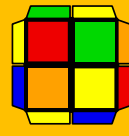
1	2	3	4	5	6
 <b>H</b> $R2 U2 R U2' R2'$ $R2 U2' R' U2 R2$	 $R U' R' (F R' F' R2 U' R') (F R' F' R)$ $(R' F R F') (R U R2' F R F') R U R'$	 $(R U R' U R U R') (F R' F' R)$ $U2 (L' U' L' U' L' U' L) (F' R U R')$	 $F (R2 U' R2' U') (R2 U R2') F'$ $U2 (F R' F' R) U' (R U' R' U) (R' F R F')$	 <b>Mirror.</b> Start thumb from back, right (left) thumb and midfinger always pinch the initial DR (DL) piece *.	
 <b>Pi</b> $R U' R2' U R2 U R2' U' R$ $R' U R2 U' R2' U' R2 U R'$ $F (R U R' U')2 F'$	 $R' U' (R' F R F') (R U' R' U2 R)$	 $(R' F R F') (R U' R' U') R U' R'$ $U2 (R U' R' F) (L' U' L U) L' U' L$	 $(R U' R U') (R' U' R' F) R2 F'$ $(F R' F' R) U' (R U' R' U) (R' F R F')$ $U2 F (R2 U' R2' U) (R2 U R2' F')$	 $(R U2' R' U') (R U R' U2') (R' F R F')$ $U' F (R U' R' U2') (R' F R F') R' F2 R$	 $(L' U2 L U) (L' U' L U2) (R U' R' F) U' (F R' F' R) U2 (R U' R' U) R U2' R'$
 <b>U</b> $F (R U R' U') F'$ $R' U' (F R' F' R) U R U2 F (U R U' R') F'$ $U2 R' U' (R' F R F') U R$	 $(R' U' R2 U) (R' U2 R U2') R' U' R'$ $U' (R' F R F')2 (R U R' U') R U R'$ $U2 R2' F2 (R U R' F) (U' R U R2)$	 $(R U2 R U' R' F) R' F2 U' F$ $U' (F R U' R' U2 F') (R U' R' F)$ $z' U2 R' U' (R2 U' R' U') R U' R'$	 $(F R' F' R) U' (R U' R' U2) R U' R'$ $U2 (F' R U' R') U (L' U' L U2) L' U' L$ $U2 (R U' R' U) (R U' R' U') (R' F R F')$	 $(R U' R2' F R F') (R U' R' U') R U R'$	 $(R' F R2 U' R' F) (R' F' R U) R' F' R$
 <b>T</b> $(R U' R' U') (R' F R F') U2 (F' L' F' L') (U' L' U' L)$	 $(L' U' L U) (R U' R' F) U2 (F R' F' R) (U' R' U' R')$ $U2 F R F' (U' R' U' R')$	 $(R U2' R2' F R F') (R U' R' U) R U2' R'$ $U2 (L' U2 L2 F' L' F) (L' U' L U') L' U2 L$ $U' F U' (R U2 R' U') (F2 R U R')$	 $(R U' R' U) (R U' R') (F R' F' R)2$ $U2 (R' U' R' U2') (R U2' R' U) R2 U' R'$ $(R' U' R U2') (R2' F' R U') R' F2 R2$	 $(R U' R' U2') (R U' R' U) (R' F R F')$ $U2 (L' U' L U2) (L' U' L U') (R U' R' F)$ $U' F (R U' R' U') (R U' R' U') (R U' R' F)$ $U' (R U2' R' U)2 (R' F R F')$	 $(R' U' R U2') (R2' F R F' R) (L' U' L U2) (L2 F' L' F' L')$ $U' (R U2 R' U') R2 U' R' F R F'$
 <b>L</b> $F' (R U' R' U') R' F R U' F (R U' R' U') (R U' R' F)$ $U2 (R U' R' U') (R' F R F')$	 $(F R' F' R) (U R U' R') U2 (L' U' L' U) (L' F' L F)$	 $(R U2' R2' F R F') R U2' R'$ $U2 (L' U2 L2 F' L' F) L' U2 L$ $U' R U2' R' (F R' F' R2 U2' R')$	 $R2' U' (R U2' R' U2) R U' R2'$ $(R' U' R' U2') (R U' R' U) R U' R2$ $U (R2 U' R' U2) (R U2' R' U R2)$	 $(R U' R' U) (R U' R') (F R' F' R2 U' R')$ $U (R U' R' U') (R' F R2 F') (U' R' U' R)$ $U' L F (L' U' L U) (L' F' L2 U L U2 L')$	 $R' F' (R U' R' U') (R' F R2 U' R' U2 R)$ $U (R U' R2' F') (R U' R' U') (R2 F' R F)$ $U' (L' U' L U') (L' U' L) (F' L F L2' U' L)$
 <b>S</b> $R U R' U R U2' R' U' R' U2' R U' R' U R$	 $R' F R2 F' U' R' U' R2 U R' *$	 $(F R' F' R) (U2 R U2' R')$	 $R U' R' (F R' F' R)$	 $(R' F' R2 U' R' F') (R' F R2 U' R')$	 $(L' U2 L U2) (R U' R' F)$
 <b>AS</b> $R' U' R' U' R' U2 R U' R U2' R' U' R' U' R'$	 $L F' L2 F U L U L2 U' L *$	 $(F' R U R') (U2' L' U2 L)$	 $(R' F R F') R U R'$	 $(R U R2' F' R F) (R U' R2' F R)$	 $(R U2' R' U2) (R' F R F')$

## 2x2 EG1 Algorithms

1	2	3	4	5	6
					
H					
$R' F (R2 U' R2' U') FUR$	$F' U (R U' R2' F2) R U' F$	$(R' U' R' F2) U F' R F'$ $U2 (L U L F2)$ $U' F L' F$ $U (R' F R F') U2$ $(F R U2' R' F)$	$(R U R' F') (R U R' U') R U R'$	[R] denotes putting D-bar in DR. <i>Mirror.</i>	
					
Pi					
$R2 B2 (R' U R' U') (R U2 R U' R2') F2 (R U R' U2') (R U R' U' F)$	$R' F R2 U' R2' F R R U R2' F' R2 U R'$	$F R' F U' (F2 R U R)$	$(R U' R' U) (R U' R' F) R U' R'$ $(R' F R U') (R' F R F') R' F R$ $F' (R U R' U') (R U R' F') R U R'$	$(R U R' U) (R U' R2' F' R) (F R' F' R) U2 F U' (R U2 R' F') (R U R' F') U (R U' R2' F R U) (R U' R' U') (R' F R F')$	$(R' F R F') (R' F R2 U R' U') R U' R' U F (R U' R' F) (R U2' R' U) F'$
					
U					
$(R U' R2' F) (R2 U R' U') R U' R'$ $(L' U L2 F') (L2' U' L U) L' U L$ $(R U R' U) (R U R2' F R2 U' R')$	$(R U' R' U) (R U' R' F) (R U2' R') (F R' F' R) U2 (R' F R U') (R' F R F') (R' F2 R F') R U R'$ $[R] U2 (R' U R' U') (R U' R' U') F2 R2$	$(R U' R2' F2 R F') (U R U R') U2 F' U2 (R U2' R' U2) F$	$(R' F R F') (R' F R2 U' R') U2 (R U' R' F) (R U' R2 F R)$	$(R U' R' U) (R U' R' U') (F R U' R') (L' F' L2 U L) (D' L' U' L)$	$(R' F R2 U' R') (D R U R') (L' U L U') (L' U L U) (F' L' U L)$
					
T					
$F (R U' R2' F' R U) R' F' R U' (R U' R2' F) (R2 U R' U2) (R' F R F')$	$F' (R' F R2 U R' U') R U R' U (R U' R' U2) (R U2' R' F) R U' R'$	$(R U' R2' F) (R U R U2' R') U2 (R' F R2 U' R' U') R' F2 R$	$(R U R2' F' R F R' F') (R2 U' R' F' R' F' R) U R2 B2 U' (R' U' R U') R' U R'$	$(R U R2' F' R) (F R' F' R) U2 (R' F' R2 U' R') (F' R U R')$	$(R U' R' U2) (F R U2' R' F) U (R U R' F)2 (U' R U' R')$
					
L					
$(R U' R' U) (R U' R2' F' R F) U (R U R' F') (R U2' R' R2) R U R'$	$(R' F R U') (R' F R2 U R' F') U (R' F R F') (R' F R U) R U2' R'$	$R' U (R2 U' R2' U') (F R2 U' R')$	$(R' F R2 U R') (F' R U2' R') U (R' F2 R F') (R' F R2 U R')$	$(R U R' F') (R U R' U') (F R' F' R) U F' (R' F R U') (R U R' U' R U R')$	$(R' F' R F) (R' F' R U) (F' R U R') U R' U2' F' (R U2 R U' R2' F)$
					
S					
$B' U L2 F2' U F' U' (R U R' U) F R U' R2' F' R$	$(R U R') (F2 U F) (R U R') U2 F (R2 U' R2' F) U' F2 U' R$	$(F R' F' R) U (R' F' R2 U R') U (R' F R U2 R U') (R2' F2 R F')$	$F' (R' F R2 U R' U') (F R' F' R) U' F' U (R U' R' U) (F R U R')$	$(R U' R' U) (R U' R' U') (R' F' R F)$	$(R' F R2 U' R' U) (R U' R' F)$
					
AS					
$B U' R2' F2 U' F U2 R' F (R2 U R' F') (U' R U' R')$	$(R U' R' F' U') (F2 R U' R') U' R U' (F2 R U2 R U' B)$	$F' (R U R' U') (R U R2' F' R)$	$F (R U' R2' F' R U) (F' R U R') U' (R U' R' F' U') (R U R' U' F)$	$F' (R' F R U) (R U R' U') R U R' U2 (R U R' F' U') (R U R' U') R U R'$	$(R U' R2' F R U') (R' F R F')$



## 2x2 EG2 Algorithms

1	2	3	4	5	6
 H $(R^2 F U^2 F^2) R^2 F' R^2'$	 $R^2 U^2 R U^2' B^2 R^2'$	 $(R' U' R U^2' R^2' F' R) U' F R$	 $R U^2' B^2 (R' U R U') B R'$	 Anti-CLL [12] (cancelling into $R^2 B^2 R^2'$ , etc.), $R^2 B^2 R^2'$ , etc. [6] (cancelling into CLL). Start thumb from back.	
 Pi $F U' (R U^2 R U') (R' U R' F')$	 $(R' U^2' R^2 U' R') F^2 R^2 F'$	 $R' F' U (R' F R^2 U^2' R' U R)$	 $(R' F U' R U R') F^2 U^2' R$	 $(L U^2' L' U) (L^2 F^2' L' F' L') (R' U' R' F^2 R^2 U) R' F^2 R$	 $(R' U^2 R U') (R^2' F^2 R F R)$
 U $(R' U R' F U') (R U' R' U^2' R^2)$	 $(F R U R' U' F) R^2 B^2$	 $(R U R' U' R) B^2 (R' U R U' R)$	 $(R^2' F^2 R U R U^2') (R^2' F R F' R)$	 $(R U' R' U^2) (L U L' U^2') R U' R'$	 $(L' U L U^2') (R' U' R U^2') L' U L$
 T $(F R F' R U R' U') R B^2 R^2'$	 $(R U R' U' R' F R F') R^2 B^2 R^2'$	 $(R' U R' F) (U' R U R^2) U' (R' U R' F) (R^2 U^2' R' U' R)$	 $R^2' F^2 (R U' F R' F' R U R) U^2 R^2 B^2 R^2' (F R U R' U' F)$	 $(R' U R U^2' R^2' F R F') R' F^2 R^2 U (R' F^2 R U') (R' U R' F R U' R)$	 $(R' U^2 R' F^2 R) F^2 R$
 L $R^2 B^2 R^2' F (R' F' R U R U' R')$	 $R^2 B^2 R^2' (F' R U R' U' R' F R)$	 $R' U' F^2 (R U^2 R' U^2') F R$	 $R' U' (R U R' F') (R U R' U') R' F' R^2$	 $(F R' F' R U R U') R B^2 R^2'$	 $(F' R U R' U' R' F) R' F^2 R^2$
 S $F U' (R^2 U' R' U^2) (R U' R^2' F')$	 $R U R' U R U^2 R B^2 R^2' U' R' U^2 R U R' U' R' F^2 R^2$	 $(R U' R' F R' F') R' F^2 R^2$	 $F (R^2 F' R^2' F') R U' R$	 $(L U L' U L U) (L F^2' L' F L') (R' F R' F^2) (R U R U' U R)$	 $R^2 B^2 (R' U' R' F) R' F' R$
 AS $(R' U R U') (R^2' F R F') (R U R' U') R' F^2 R^2$	 $R' U' R U' R' U^2 R' F^2 R^2 U' R U^2 R' U' R U' R B^2 R^2$	 $(R' F R F') (R U R B^2 R^2)$	 $(R' U R' F) (R^2 F R^2' F)$	 $(R' U' R U' R' U') (R' F^2 R F' R)$	 $R^2' F^2 R (F R F' R U R)$