Double Rotor Letterbox module designs

These diagrams show you how to fold the Double Rotor Letterbox module and how to use it to make the 6-part Double Rotor Cube and the 12-part Tiled Diablo Cube. Using 24 modules would similarly produce a Tiled Double Rotor Cube.

The same module can, of course, also be reconfigured so that it will construct similarly patterned silverhedra or, indeed, any other form that can be assembled from Letterbox modules. I have not made all these variations so cannot say how successful or otherwise the finished designs will be.

While these diagrams show you how to achieve Double Rotor and Tiled Diablo patterns using modules folded from just one colour of irogami, you can, if you wish, increase the attractiveness of your designs still further by making them in any other modular colouring appropriate to the form.

I designed and published this module in 2001.
The 6-part Double Rotor pattern cube

You will need six squares of irogami. Begin with your paper arranged white side up.

1. Fold in half diagonally in both directions then unfold.

2. Fold both the top and bottom corners into the centre then unfold.

3. Fold the top corner down to the quarter way point, then unfold. Fold the bottom corner up to the quarter way point, then unfold.

4. Fold the bottom corner up to the three quarter way point, then unfold.
5. Turn over sideways

6. Fold the top corner down to the three quarter way point.

7. Fold the bottom corner of the front flap upwards using the existing crease.

8. Fold the bottom edge of the front flap upwards using the existing crease.

9. Fold the bottom corner upwards using the existing crease.

10. Fold the top corner of the front flap downwards using the existing crease.
11. Fold the top edge of the front flap downwards using the existing crease.

12. Fold both outside points inwards as shown.

13. Fold the top left and bottom right corners inwards like this.

14. Turn over sideways.

15. Configure the module by folding the bottom left and top right corners inwards then unfolding to right angles.

16. The Double Rotor motif Letterbox module is finished. Make six.

17. The modules go together like

18. This is the finished Double Rotor motif Letterbox Cube.
The 12-part Tiled Diablo pattern cube
You will need twelve squares of irogami. Begin by folding your modules to step 14 of the Double Rotor Cube.


15. Fold in half diagonally making sure the corners remain sharp then open at right angles.

16. Turn over sideways.

17. The finished module should look like this. Make twelve.

18. Four modules go together like this ...

19. ... to form one face of the cube.
The 24-part Tiled Double Rotor cube

The Tiled Double Rotor Cube looks like this. There is an almost optical illusion quality to this design. The rotor in the centre of each face goes the opposite to the rotors around the edges.