

Project Gyro Ψynergy

Group Members [B. Tech. in CSE – SE (1st Year 1st Sem)]

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Summary

Stabilizers work on the principle of center of gravity. It uses counter weights to keep the center of gravity undisturbed when the whole body moves, rotates and revolves. When the object moves to one side, the counter weights apply force on the opposite side of the movement so that the body remains undisturbed.

They are very commonly used while making movies, during event photography and videography and during nature photography etc. In all these places, either the person has to continuously move from one place to another or has to be totally still for hours. In both the cases these stabilizers play an important role as they keep the camera steady just as the photographer want it so that perfect shots/videos can be obtained. It can also be used for as a camera accessories holder.

Since many camera stabilizers are already present in the market, our goal was to make it more cost efficient. To do that we have used broken HDD, brushless motor controller, old and damaged earphones and cheap PVC pipes. New stabilizers can cost anywhere between ₹2,500 all the way up to ₹6,500; whereas on the other hand our model was made with just ₹800, thus bringing the price down by more than 65%.

To produce it on a large scale, PVC Pipes can be replaced by Aluminum to increase the durability. We can use copper wire instead of old earphones to increase the longevity of the product. Also, we can replace nuts and bolts by proper weights of adequate mass to make the product more stable.



A model of motor-controlled motion stabilizer