

Using the Accumulation Buffer

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Using the Accumulation Buffer to Achieve *Motion Blur*

1. Multiple the Accumulation Buffer by (1. – K)
2. Draw the new frame into the Back Buffer
3. Multiply the Back Buffer by K and add it into the Accumulation Buffer (“accumulate”)
4. Return the Accumulation Buffer to the Back Buffer
5. `glutSwapBuffers()`

The first frame results in: $FB1 = K \cdot F1 + (1-K) \cdot \text{Black}$

The second frame results in: $FB2 = K \cdot F2 + (1.-K) \cdot FB1 = K \cdot F2 + (1.-K) \cdot K \cdot F1 + (1.-K)^2 \cdot \text{Black}$

The third frame results in: $FB3 = K \cdot F3 + (1.-K) \cdot K \cdot F2 + (1.-K)^2 \cdot K \cdot F1 + (1.-K)^3 \cdot \text{Black}$

```
glAccum( GL_MULT, 1.-K );  
glAccum( GL_ACCUM, K );  
glAccum( GL_RETURN, 1.00 );
```

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